9110-04-P

#### DEPARTMENT OF HOMELAND SECURITY

**Coast Guard** 

46 CFR Parts 30 and 150

[Docket No. USCG-2022-0327]

RIN 1625-AC73

**2022** Liquid Chemical Categorization Updates

**AGENCY**: Coast Guard, DHS.

**ACTION**: Final rule.

SUMMARY: The Coast Guard is issuing this final rule to align liquid chemical categorization tables in its tank vessels and bulk dangerous cargo regulations with the 2020 Edition of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk. The updated tables provide a list of the liquid hazardous materials, liquefied gases, and compressed gases approved for international and domestic maritime transportation and indicate how each substance is categorized by its pollution potential, safe carriage requirements, chemical flammability, combustibility, and compatibility with other substances. This rule imposes no additional costs to chemical shippers or vessel owners.

**DATES**: This final rule is effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: To view documents mentioned in this preamble as being available in the docket, go to www.regulations.gov, type USCG-2022-0327 in the search box and click "Search." Next, in the Document Type column, select "Supporting & Related Material." FOR FURTHER INFORMATION CONTACT: For information about this document call or email Dr. Raghunath Halder, U.S. Coast Guard Hazardous Materials Division

(CG-ENG-5); telephone 202-372-1422, email Raghunath.Halder@uscg.mil, or Dr.

Sandip Chattopadhyay, CG-ENG-5; telephone 202-372-1424, email

Sandip.Chattopadhyay@uscg.mil.

#### SUPPLEMENTARY INFORMATION:

#### **Table of Contents for Preamble**

- I. Abbreviations
- II. Basis and Purpose
- III. Background
- IV. Discussion of Comments
- VI. Discussion of the Rule
- V. Regulatory Analyses
  - A. Regulatory Planning and Review
  - B. Small Entities
  - C. Assistance for Small Entities
  - D. Collection of Information
  - E. Federalism
  - F. Unfunded Mandates
  - G. Taking of Private Property
  - H. Civil Justice Reform
  - I. Protection of Children
  - J. Indian Tribal Governments
  - K. Energy Effects
  - L. Technical Standards
  - M. Environment

#### I. Abbreviations

CAS RN CAS Registry Number CFR Code of Federal Regulations

CG-ENG-5 U.S. Coast Guard Hazardous Materials Division CHRIS Chemical Hazards Response Information System

DHS Department of Homeland Security

FR Federal Register

IBC Code International Code for the Construction and Equipment of Ships

Carrying Dangerous Chemicals in Bulk

IBC Code (2020) 2020 edition of the IBC Code LCC Liquid Chemical Categorization IMO International Maritime Organization

MARPOL International Convention for the Prevention of Pollution from

Ships

MEPC International Maritime Organization's Marine Environment

**Protection Committee** 

MEPC.2/Circ.25 MEPC Resolution number 2, Circular 25, dated December 1, 2019

NPRM Notice of proposed rulemaking
OMB Office of Management and Budget

§ Section

U.S.C. United States Code

#### II. Basis and Purpose

The legal basis of this rulemaking is title 46 of the United States Code (U.S.C.), Section 3703, which requires the Secretary of the department in which the Coast Guard is operating to prescribe regulations relating to the operation of vessels that carry liquid bulk dangerous cargoes, and to the types and grades of cargo those vessels carry.

Additional regulatory authority is provided by 33 U.S.C. 1903 (Administration and enforcement, regulations to implement the International Convention for the Prevention of Pollution from Ships (MARPOL) Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973), 46 U.S.C. 2103 (Superintendence of the merchant marine, general merchant marine regulatory authority), and 46 U.S.C. 3306 (Regulations, regulations for the safety of individuals and property on inspected vessels). The Secretary's authority under these statutes is delegated to the Coast Guard in the Department of Homeland Security (DHS) Delegation 00170.1, Revision No. 01.3, paragraphs (II)(77) and (92)(a) and (b).

The purpose of this rulemaking is to provide updates to regulatory tables that list liquid hazardous materials, liquefied gases, and compressed gases that have been approved for maritime transportation in bulk, and to indicate how each cargo is categorized by its pollution risk and safe carriage requirements.

# III. Background

The Coast Guard is tasked by Congress with promulgating regulations to improve the shipping practices in the United States. Since 1983, the Coast Guard has published tables with chemicals that are safe to ship together, and others that are incompatible for shipping, in order to improve their shipping safety.

Each December, the International Maritime Organization's (IMO) Marine

Environment Protection Committee (MEPC) releases an annual circular that lists cargoes
which have undergone a multi-year review to determine safe carriage requirements. A

cargo is listed in the circular if a tripartite agreement approved it for international bulk maritime transportation and the MEPC validated the approval. The International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) is periodically revised by parties to the IBC Code to include the updated cargoes listed in the MEPC annual circulars.

The Coast Guard, as the administrator of regulations that control liquid chemical shipping practices, has endeavored to update these regulations to keep the Code of Federal Regulations (CFR) aligned with international standards. This rulemaking is one in a planned series of rulemakings that will periodically update the Code of Federal Regulations (CFR) to align with latest updates of the IBC Code (2020). The last time the Coast Guard updated these regulations was in a final rule published April 17, 2020 entitled "2013 Liquid Chemical Categorization Updates" (85 FR 21660). In addition, the Coast Guard corrected minor typographical errors in a correcting amendments document published May 8, 2020 and effective May 18, 2020 and entitled "2013 Liquid Chemical Categorization Updates; Correction" (85 FR 27308). The Coast Guard corrected additional minor errors in a correcting amendments document published and effective on August 5, 2021 and entitled "2013 Liquid Chemical Categorization Updates" (86 FR 42738).

# **IV.** Discussion of Comments

On September 22, 2022, the Coast Guard published a notice of proposed rulemaking (NPRM) titled "2022 Liquid Chemical Categorization Updates" (87 FR 57984) requesting comments on the proposed changes implemented by this final rule.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> https://www.federalregister.gov/documents/2020/04/17/2019-27628/2013-liquid-chemical-categorization-updates. (Last visited 05/04/2023.)

<sup>&</sup>lt;sup>2</sup>https://www.federalregister.gov/documents/2020/05/08/2020-09958/2013-liquid-chemical-categorization-updates-correction. (Last visited 05/31/2023.)

 $<sup>^3</sup> https://www.federal register.gov/documents/2021/08/05/2021-15740/2013-liquid-chemical-categorization-updates. (Last visited 05/31/2023.)$ 

<sup>&</sup>lt;sup>4</sup>https://www.federalregister.gov/documents/2022/09/22/2022-18798/2022-liquid-chemical-categorization-updates. (Last visited 05/04/2023.)

The comment period for the NPRM ended on December 21, 2022. The Coast Guard received no comments on the proposed rule.

#### V. Discussion of the Rule

Coast Guard regulations in 46 CFR chapter I subchapters D (Tank vessels, parts 30 through 40) and O (Certain bulk dangerous cargoes, parts 150 through 155) contain requirements for ensuring the safe maritime carriage (transportation) of certain bulk liquid cargoes. Tables in subchapters D and O list the cargoes that have been approved for maritime carriage. The tables also categorize each cargo's pollution-hazard risk and safe carriage requirements. The categories are developed during the Coast Guard and MEPC's assessment and review processes, which are described in the following paragraphs. This rule incorporates information from MEPC Resolution number 2, Circular 25, dated December 1, 2019 (MEPC.2/Circ.25)<sup>5</sup> that vessel owners and operators, and shippers use to transport such cargoes safely and so brings 46 CFR chapter I subchapters D and O into closer conformity with the IBC Code (2020).

The agencies administering international treaties must agree on the new cargo's assessment before the cargo can be approved for transportation. This is done by a tripartite agreement between the administrations of the exporting country, the importing country, and the country in which the ship that will carry the cargo is registered. The tripartite agreement categorizes the cargo's pollution-hazard risk, flammability, and combustibility in accordance with the IBC Code. A copy of the tripartite agreement is forwarded to the MEPC and to the administration of every country that is signatory to the IBC Code.

The Coast Guard is unique among IBC Code-signatory administrations because, in addition to categorizing the cargo in the tripartite agreement, the Coast Guard also

<sup>&</sup>lt;sup>5</sup> This document is available in the docket and accessible online at https://docs.imo.org/Shared/Download.aspx?did=119893.

assigns each cargo to a compatibility group. The compatibility grouping guides IBC signatories and shippers in determining which cargoes cannot safely be shipped with other cargoes in adjacent tanks, without special precautions. The compatibility grouping is informed by chemical analyses and test data submitted by manufacturers.

The MEPC conducts its own multi-year review and assessment of the information contained in the tripartite agreement, and, following that review, either validates or modifies the agreement's information. Our tables also reflect any modifications resulting from this assessment. Each December, the MEPC releases a circular listing each new cargo for which it has completed its review. The circular lists the countries that have approved each new cargo for international maritime transportation and provides information about each cargo's pollution-hazard risk, flammability and combustibility. Periodically, the IBC Code is revised to update the cargoes listed in the MEPC's annual circulars.

This rule brings the following tables in 46 CFR chapter I into closer conformity with the IBC Code (2020) by incorporating information from MEPC.2/Circ.25:

- Table 30.25-1, List of Flammable and Combustible Bulk Liquid Cargoes, in subchapter D;
- Table 1 to Part 150, Alphabetical List of Cargoes, in subchapter O;
- Table 2 to Part 150, Grouping of Cargoes, in subchapter O; and
- Appendix I to Part 150, Exceptions to the Chart, in subchapter O.

Table 30.25-1 lists flammable or combustible cargoes that, when transported in bulk, must be in vessels certificated under subchapter D regulations. We are updating Table 30.25-1 to add flammable or combustible chemicals that are approved for shipping by the IBC Code (2020) and appear in the MEPC.2/Circ.25. The circular is available online at http://ocn.cl/wp-content/uploads/2021/03/IMO-MEPC-2-CIRC-25-2019.pdf.

Table 1 to Part 150 is a comprehensive table that includes all cargoes subject to

the regulations in subchapter D. Table 1 lists these cargoes alphabetically and lists the chemical compatibility group number assigned to each cargo. We are updating Table 1 to include cargoes that have been approved for shipping by the IBC Code (2020) and MEPC.2/Circ.25.

Table 2 to Part 150 contains the proper shipping names of all the cargoes listed in Table 1, sorted by chemical compatibility group numbers instead of listed alphabetically. We align Table 2 with Table 1 to Part 150 and so update it to include cargoes that have been approved for shipping by the IBC Code (2020) and MEPC.2/Circ.25.

Appendix I to Part 150 contains cargoes listed in Tables 1 and 2 to Part 150 that have positive chemical compatibility exceptions. To illustrate, consider the following: cargoes in group X and cargoes in group Y are generally incompatible for co-shipping. However, there is one cargo in group X and one cargo in group Y that, for whatever reason, can be shipped together safely. This is an example of a positive chemical compatibility exception, and it would be listed in Appendix I so that stakeholders can maximize the efficiency of their shipping practices. We are updating Appendix I to include cargoes from the updated tables 1 and 2 that have such positive exceptions.

To further illustrate how the chemical categorization tables work together,

Section (b) of Appendix I to Part 150 contains cargoes listed in tables 1 and 2 that have

negative chemical compatibility exceptions. Even if cargoes from hypothetical group X

and group Y are generally compatible for co-shipping, there may be a particular chemical
in group X that, when stored with a particular chemical from group Y, can react
dangerously. This is an example of a negative chemical compatibility exception and
would be listed in Appendix I(b) so that stakeholders can be sure to ship such cargoes
safely.

We are including one addition to section (b) of Appendix I to Part 150 that was not included in the proposed rule. On March 2, 2023, the Coast Guard received a report

from industry stakeholders detailing testing procedures that demonstrated the incompatibility of Glycol ethers (Group 40) and Acrylonitrile (Group 15). According to the report, which is available in the docket, the chemical reaction that resulted from the reactivity test released gas and increased temperatures. We have decided to include this negative chemical compatibility exception in this final rule in the interest of public safety.

In addition to the introduction of new chemicals into these tables, the Coast Guard is adding a new column to Table 1 to Part 150 that contains a CAS Registry Number (RN). CAS, a division of the non-profit organization American Chemical Society, designed the CAS Registry to prevent the frustration, delays, and safety concerns that can come with a convoluted system of identifying chemicals. A CAS RN is a unique and unambiguous identifier for a specific substance that allows clear communication and links together all available data and research about that substance. Government agencies rely on CAS RNs for substance identification in regulatory applications because they are unique, easily validated, and internationally recognized. The addition of the CAS RNs makes it easier to use the information and leads to safer shipping practices.

The Coast Guard considered proposing the removal of Chemical Hazards

Response Information System (CHRIS) codes from the tables. While the Coast Guard

decided not to propose such a removal in the proposed rule, we solicited comments from
the public on the utility of CHRIS codes. Having received no comments, the Coast

Guard will not remove the CHRIS codes in this final rule. However, the next iteration of
updates to these tables will most likely propose the removal of the CHRIS codes, which
are no longer used in practice.

The rule also revises the authority citation to 46 CFR Part 150 so that it no longer cites 44 U.S.C. 3507 in citing DHS Delegation No. 00170.1. This was done because DHS Delegation No. 00170.1 does not address 44 U.S.C. 3507 and that statute dictates the manner in which the Coast Guard may seek approval to collect information, rather

than delegating authority to edit the CFR. The authority citation is further revised to reflect another revision to the citation of DHS Delegation No. 00170.1.

In this final rule, we also add clarifying language to the chemical entries, make conforming edits across the tables, and correct typographical and punctuation errors. We have also edited the Notes and formatting in the tables to make them easier to understand.

# VI. Regulatory Analyses

We developed this rule after considering numerous statutes and Executive orders related to rulemaking. Below we summarize our analyses based on these statutes or Executive orders.

# A. Regulatory Planning and Review

Executive Orders 12866 (Regulatory Planning and Review), as amended by Executive Order 14094 (Modernizing Regulatory Review), and 13563 (Improving Regulation and Regulatory Review) direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility.

Executive Order 13610 (Identifying and Reducing Regulatory Burdens) promotes the goals of Executive Order 13563. Executive Order 13610 aims to modernize the regulatory systems and to reduce unjustified regulatory burdens and costs on the public.

The Office of Management and Budget (OMB) has not designated this rule a significant regulatory action under section 3(f) of Executive Order 12866, as amended by Executive Order 14094. Accordingly, OMB has not reviewed this regulatory action. A regulatory analysis (RA) follows.

The Coast Guard received no comments from the public on the proposed rule.

Since there was no feedback from public commenters that would require changes to the regulatory analysis for this final rule, we adopt the regulatory analysis that we presented in the proposed rule.

# **Summary of Impacts of this Rule**

In this rule, the Coast Guard incorporates information from MEPC.2/Circ.25 into the tables of subchapters D and O to conform the tables with the IBC Code (2020). In subchapter D, we revise table 30.25-1; in subchapter O, we revise tables 1 and 2 and Appendix I to part 150. A summary of the impacts from the rule follows.

Category	Summary				
Applicability	Revise Table 30.25-1 in subchapter D, and Tables 1 and 2 and Appendix I to Part 150 in subchapter O to incorporate information from MEPC.2/Circ.25.				
Affected Population	All U.S and foreign-flagged tank vessels when in U.S. waters				
Costs to Industry	No estimated costs to private industry.				
Costs to the Federal Government	No estimated costs to the Federal Government.				
Qualitative Benefits	Creates consistency with current international standards by incorporating information from MEPC.2/Circ.25. Clarifies regulatory requirements and makes the updated chemical information easier to use.				

#### **Affected Population**

This rule updates the Liquid Chemical Categorization (LCC) tables that list the names, pollution risk categorization, safe carriage requirements, chemical flammability, combustibility, and chemical compatibility of each liquid hazardous material, liquefied gas, and compressed gas that has been categorized and approved for maritime transportation in bulk by the IMO and the Coast Guard. In this rule, the Coast Guard is making no additional changes about whether any specific liquid bulk dangerous cargo is approved for maritime transportation, about how any specific cargo is categorized, or about carriage requirements that apply to any specific cargo. The rule provides updated information about cargoes that are currently approved for maritime transportation in bulk, and the cargo's pollution categorization and minimum transportation safety requirements.

The rule also adds a column to Table 1 of part 150 containing the applicable CAS RNs. This rule applies to the carriage of the cargoes by the vessel population described in 46 CFR 30.01–5, 150.110 (with exceptions outlined in 46 U.S.C. 3702), 153.1, and 154.5. All U.S.- and foreign-flagged tank vessels are included, unless exempted by 46 CFR 30.01–5 or 46 CFR 153.1. This rule also applies to U.S.- and foreign-flagged self-propelled bulk cargo-carrying vessels when in U.S. waters, see 46 CFR 153.1. Foreign tank vessels are exempt from this regulation when on innocent passage through U.S. waters, see 33 CFR 157.01.

#### Costs

This rule updates the tables to reflect changes already made under MEPC approved tripartite agreements regarding which liquid chemical substances are approved for bulk maritime transportation, and how those substances are categorized with respect to their pollution risk. The Coast Guard already applies these standards when assessing ad hoc domestic carriage requests for liquid chemicals. Vessel owners and chemical shippers will have to comply with these standards to receive Coast Guard approval for carriage. Industry is aware of this procedure, and we believe that chemical shippers already comply with these standards. Therefore, the Coast Guard does not expect that this rule will change established shipping requirements or current practices among chemical shippers. No additional labor or equipment will be required because of this rule. As a result, we expect that there will be no incremental private sector costs to chemical shippers or vessel owners. Further, we do not anticipate that the rule will impose any additional costs on the Coast Guard. This rule incorporates the Coast Guard's compatibility categorizations, as well as chemical cargoes and categorizations listed in IMO's IBC Code (2020) and MEPC.2/Circ.25.

#### **Benefits**

The rule provides qualitative benefits by updating the LCC tables, thereby aligning the domestic shipping requirements for liquid bulk dangerous cargoes with current international standards. The Coast Guard expects this rule to serve the public through greater clarity regarding the regulatory requirements in the LCC tables and through easier use of chemical safety information. This rule codifies existing industry practices which will add clarity about regulatory requirements in the LCC tables.

#### B. Small Entities

Under the Regulatory Flexibility Act, 5 U.S.C. 601–612, we have considered whether this rule has a significant economic impact on a substantial number of small entities. The term "small entities" comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

There are no small vessel owners or chemical shippers engaged in the transport of the LCC chemicals. In addition, the rule does not impose economic costs on the regulated public. The Coast Guard does not expect that small entities will incur any incremental costs; therefore, the Coast Guard finds that there is no significant impact on small entities nor are a substantial number of small entities incurring impacts. Therefore, the Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities.

# C. Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996, Public Law 104-121, we offer to assist small entities in understanding this rule so that they can better evaluate its effects on them and participate in the rulemaking. The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

Small businesses may send comments on the actions of Federal employees who

enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency's responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1-888-REG-FAIR (1-888-734-3247).

# D. Collection of Information

This rule calls for no new or revised collection of information under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501–3520. This rule simply updates tables that list liquid bulk dangerous cargoes that have been approved and categorized for bulk maritime transportation, which does not involve information collection.

#### E. Federalism

A rule has implications for federalism under Executive Order 13132 (Federalism) if it has a substantial direct effect on States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this rule under Executive Order 13132 and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132. Our analysis follows.

It is well settled that States may not regulate in categories reserved for regulation by the Coast Guard. It is also well settled that all of the categories covered in 46 U.S.C. 3306, 3703, 7101, and 8101 (design, construction, alteration, repair, maintenance, operation, equipping, personnel qualification, and manning of vessels), as well as the reporting of casualties and any other category in which Congress intended the Coast Guard to be the sole source of a vessel's obligations, are within the field foreclosed from regulation by the States. This rule would amend existing regulations for inspected tank vessels carrying certain bulk dangerous cargoes. These cargoes fall within the categories in 46 U.S.C. section 3703 and within fields in which the States are foreclosed from

regulating. Therefore, because the States may not regulate within these categories, this rule is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132.

#### *F. Unfunded Mandates*

The Unfunded Mandates Reform Act of 1995, 2 U.S.C. 1531–1538, requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 (adjusted for inflation) or more in any one year. Although this rule will not result in such expenditure, we do discuss the effects of this rule elsewhere in this preamble.

# G. Taking of Private Property

This rule will not cause a taking of private property or otherwise have taking implications under Executive Order 12630 (Governmental Actions and Interference with Constitutionally Protected Property Rights).

# H. Civil Justice Reform

This rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988 (Civil Justice Reform) to minimize litigation, eliminate ambiguity, and reduce burden.

# I. Protection of Children

We have analyzed this rule under Executive Order 13045 (Protection of Children from Environmental Health Risks and Safety Risks). This rule is not an economically significant rule and will not create an environmental risk to health or risk to safety that might disproportionately affect children.

#### J. Indian Tribal Governments

This rule does not have tribal implications under Executive Order 13175

(Consultation and Coordination with Indian Tribal Governments), because it will not

have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

# K. Energy Effects

We have analyzed this rule under Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use). We have determined that it is not a "significant energy action" under that order because it is not a "significant regulatory action" under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

# L. Technical Standards

The National Technology Transfer and Advancement Act, codified as a note to 15 U.S.C. 272, directs agencies to use voluntary consensus standards in their regulatory activities unless the agency provides Congress, through OMB, with an explanation of why using these standards would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., specifications of materials, performance, design, or operation; test methods; sampling procedures; and related management systems practices) that are developed or adopted by voluntary consensus standards bodies.

This rule does not use technical standards. It is based on international standards that were developed using consensus standards development processes. Therefore, we did not consider the use of voluntary consensus standards.

#### M. Environment

We have analyzed this rule under Department of Homeland Security Management Directive 023-01, Rev. 1, associated implementing instructions, and Environmental Planning COMDTINST 5090.1 (series), which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321–4370f), and have made

a determination that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. A Record of Environmental Consideration supporting this determination is available in the docket. For instructions on locating the docket, see the ADDRESSES section of this preamble.

This rule meets the criteria for categorical exclusions L52 and L54 of Appendix A, Table 1 of DHS Instruction Manual 023–01–001–01, Rev. 1. <sup>6</sup> Paragraph L52 pertains to regulations concerning vessel operation safety standards, equipment approval, and or equipment carriage requirements; paragraph L54 pertains to promulgation of regulations that are editorial or procedural. This rule updates the LCC tables by incorporating information from MEPC.2/Circ.25 to more closely conform the tables with the IBC Code (2020). These tables provide a list of liquid hazardous material, liquefied gases, and compressed gases that are approved for international and domestic maritime transportation and indicate how each substance is categorized by its pollution potential, safe carriage requirements, chemical flammability, combustibility, and compatibility with other substances. All these changes are consistent with the Coast Guard's maritime safety and stewardship missions.

#### **List of Subjects**

46 CFR Part 30

Cargo vessels, Foreign relations, Hazardous materials transportation, Penalties, Reporting and recordkeeping requirements, Seamen.

46 CFR Part 150

Hazardous materials transportation, Marine safety, Occupational safety and health, Reporting and recordkeeping requirements.

For the reasons discussed in the preamble, the Coast Guard is proposing to amend

<sup>&</sup>lt;sup>6</sup> https://www.dhs.gov/sites/default/files/publications/DHS\_Instruction%20Manual%20023-01-001-01%20Rev%2001 508%20Admin%20Rev.pdf. (Last visited 05/04/2023)

46 CFR parts 30 and 150 as follows:

01.3.

#### PART 30—GENERAL PROVISIONS

- The authority citation for part 30 is revised to read as follows:
   Authority: 46 U.S.C. 2103, 3306, 3703; DHS Delegation 00170.1, Revision No.
- 2. In § 30.25-1, amend Table 30.25-1 by:
- a. Adding in alphabetical order entries for "Alcohol (C10-C18) poly (7) ethoxylates", "Alkylbenzenes mixtures (containing naphthalene)", "Alkyl/cyclo (C4-C5) alcohols", "Alkylphenols (C10-C18, C12 rich)", "Alkyl (C10-C15, C12 rich) phenol poly (4-12) ethoxylate", "Cresol/Phenol/Xylenol mixture", "Cyclohexane-1, 2-dicarboxylic acid, diisononyl ester", "1-Dodecene";, "n-Dodecyl mercaptan", "Ethylene glycol/(>75%)/Sodium alkyl carboxylates/borax mixture", "Ethylene glycol (>85%)/Sodium alkyl carboxylates mixture", "Glucitol/Glycerol blend propoxylated (containing less than 10% amines)";
- b. Removing the entry for "Glucitol/glycerol blend propoxylated (containing 10% or more amines)";
- c. Adding in alphabetic order entries for "Glucitol/Glycerol blend propoxylated (containing 10% or more amines)", "Hexahydro-1,3,5-trimethy/l-1,3,5-triazine solution (45% or less)", "Long-chain alkylphenol (C14-C18)" and "Long-chain alkylphenol (C18-C30)";
  - d. Removing the entry for "N-Methylglucamine solution (70% or less)";
- e. Adding in alphabetic order entries for "N-Methylglucamine solution", "Naphthalene crude (molten)", "Offshore contaminated bulk liquid P (Pollution-only products)", "Offshore contaminated bulk liquid S (Safety hazard products)",

- f. Under the heading "Oil, fuel:" after the entry "No. 6", adding a heading for "Oil, misc.:", and, in alphanumeric order, adding the entries, "Used cooking oil" and "Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)";
- g. Adding in alphabetic order entries for "Polyolefinamine (C17+)", and "Rapeseed acid oil";
  - h. Removing the entry for "Rape seed oil fatty acid methyl esters\*";
- i. After the entry for "*Undecylbenzene*, see Alkyl (C9+) benzenes", adding a heading for "Vegetable acid oils, n.o.s.:." and an entry for "Vegetable oil mixtures, containing less than 15% free fatty acid";
  - j. Revising the entry for "Vegetable oils, n.o.s";
- k. Removing the entry for "Vinyltoluene" and adding in alphabetic order an entry for "Vinyl toluene";
- 1. Under the heading for "Waxes:", adding, in alphanumeric order, an entry for "Hydrocarbon"; and
- m. In the Notes to Table 30.25-1, in the entry for "ST," remove the text "2016" and, in its place, add the text "2020".

The additions read as follows:

# § 30.25-1 Cargoes carried in vessels certificated under the rules of this subchapter \* \* \* \* \*

Table 30.25-1 – List of Flammable and Combustible Bulk Liquid Cargoes

[See NOTES at the end of this table for an explanation of symbols and terms used in this table. See Table 2, 46 CFR part 153, for additional cargoes that may be carried by a tank barge.]

Cargo Name	IMO Annex II pollution
	category
* * * * * *	
Alcohol (C10-C18) poly (7) ethoxylates	Y
* * * * * *	
Alkylbenzenes mixtures (containing naphthalene)	X
Alkyl/cyclo (C4-C5) alcohols	Y
* * * * * *	

A11 1 1 (010 010 010 11)	***
Alkylphenols (C10-C18, C12 rich)	Y
Alkyl (C10-C15, C12 rich) phenol poly (4-12) ethoxylate	Y
****	
Cresol/Phenol/Xylenol mixture	Y
Creson i nenon Ayrenor mixture	1
* * * * * *	
Cyclohexane-1,2-dicarboxylic acid, diisononyl ester	Y
*****	
1 D 1	Y
1-Dodecene	Y
* * * * *	
n-Dodecyl mercaptan	X
*****	
F(1 1 1 16 750/)/0 1' 11 1 1 1 //	37
Ethylene glycol (>75%)/Sodium alkyl carboxylates/borax	Y
mixture	
Ethylene glycol (>85%)/Sodium alkyl carboxylates mixture	Z
****	ı
C12-1/C11111 1 1 1 1 1 1 1 1 1 1 1 1 1 1	37
Glucitol/Glycerol blend propoxylated (containing less than	Y
10% amines)	
Glucitol/Glycerol blend propoxylated (containing 10%	Z
or more amines)	_
*****	
	T
Hexahydro-1,3,5-trimethyl-1,3,5-triazine solution (45% or	Y
less)	
*****	
T 1 1 1 1 1 (C14 C10)	***
Long-chain alkylphenol (C14-C18)	Y
Long shain all rulphonal (C19 C20)	T/
Long-chain alkylphenol (C18-C30)	Y
******	<u>Y</u>
*****	-
* * * * * * *  N-Methylglucamine solution	Z
*****	Z
* * * * * * *  N-Methylglucamine solution	-
* * * * * * *  N-Methylglucamine solution  * * * * * * *	Z
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  *******	Z Y
*****  N-Methylglucamine solution  ******  Naphthalene crude (molten)  ******  Offshore contaminated bulk liquid P (Pollution-only	Z
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  ******  Offshore contaminated bulk liquid P (Pollution-only products)	Z Y
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  ******  Offshore contaminated bulk liquid P (Pollution-only products)	Z Y
* * * * * * *  N-Methylglucamine solution  * * * * * * *  Naphthalene crude (molten)  * * * * * * *  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard	Z Y X
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  ******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)	Z Y X
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  ******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  *******	Z Y X
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  ******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  ******  Oil, misc.:	Z Y X
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  ******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  *******	Z Y X
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  ******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  ******  Oil, misc.:  Used cooking oil	Z Y X X
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  ******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  ******  Oil, misc.:  Used cooking oil  Used cooking oil (triglycerides, C16-C18 and C18	Z Y X X
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  ******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  ******  Oil, misc.:  Used cooking oil  Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)	Z Y X X
******  N-Methylglucamine solution  *******  Naphthalene crude (molten)  *******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  *******  Oil, misc.:  Used cooking oil  Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)  ******	Z Y X X X
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  ******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  ******  Oil, misc.:  Used cooking oil  Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)	Z Y X X
******  N-Methylglucamine solution  *******  Naphthalene crude (molten)  *******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  *******  Oil, misc.:  Used cooking oil  Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)  ******	Z Y X X X
******  N-Methylglucamine solution  *******  Naphthalene crude (molten)  *******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  *******  Oil, misc.:  Used cooking oil  Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)  *******  Polyolefinamine (C17+)  *******	Z Y X X X Y
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  *******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  ******  Oil, misc.:  Used cooking oil  Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)  ******  Polyolefinamine (C17+)  *******  Rapeseed acid oil	Z Y X X X
******  N-Methylglucamine solution  *******  Naphthalene crude (molten)  *******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  *******  Oil, misc.:  Used cooking oil  Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)  *******  Polyolefinamine (C17+)  *******	Z Y X X X Y
******  N-Methylglucamine solution  *******  Naphthalene crude (molten)  *******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  *******  Oil, misc.:  Used cooking oil  Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)  *******  Polyolefinamine (C17+)  *******  Rapeseed acid oil  *******	Z Y X X X Y
******  N-Methylglucamine solution  *******  Naphthalene crude (molten)  *******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  *******  Oil, misc.:  Used cooking oil  Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)  *******  Polyolefinamine (C17+)  *******  Rapeseed acid oil  *******  Vegetable acid oils, n.o.s.:	Z Y X X X Y
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  ******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  ******  Oil, misc.:  Used cooking oil  Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)  ******  Polyolefinamine (C17+)  ******  Rapeseed acid oil  ******  Vegetable acid oils, n.o.s.:  Vegetable oil mixtures, containing less than 15% free	Z Y X X X Y
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  *******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  *******  Oil, misc.:  Used cooking oil  Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)  ******  Polyolefinamine (C17+)  ******  Rapeseed acid oil  *******  Vegetable acid oils, n.o.s.:  Vegetable oil mixtures, containing less than 15% free fatty acid (m)	Z Y X X X Y
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  ******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  ******  Oil, misc.:  Used cooking oil  Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)  ******  Polyolefinamine (C17+)  ******  Rapeseed acid oil  ******  Vegetable acid oils, n.o.s.:  Vegetable oil mixtures, containing less than 15% free	Z  Y  X  X  X  Y
******  N-Methylglucamine solution  ******  Naphthalene crude (molten)  *******  Offshore contaminated bulk liquid P (Pollution-only products)  Offshore contaminated bulk liquid S (Safety hazard products)  *******  Oil, misc.:  Used cooking oil  Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)  ******  Polyolefinamine (C17+)  ******  Rapeseed acid oil  *******  Vegetable acid oils, n.o.s.:  Vegetable oil mixtures, containing less than 15% free fatty acid (m)	Z  Y  X  X  X  Y

Vinyl toluene	Y
***	* * * *
Waxes: *****	
Hydrocarbon	
	Y
* * * *	****

#### **Notes:**

"#" = The noxious liquid substance status is undetermined—see 46 CFR 153.900(c) for shipping on an oceangoing vessel.

"†" = Marine occupational safety and health regulations for benzene, 46 CFR part 197, subpart C, may apply to this cargo.

"[ ]" = Provisional categorization to which the United States is party.

"@" = The noxious liquid substance category has been assigned by the Coast Guard, in the absence of one assigned by the IMO. The category is based on a GESAMP Hazard Profile or, by analogy, to a closely related product having a noxious liquid substance assigned.

**Bolded** entries were added from the March 2012 Annex to the 2007 edition of the IBC Code (MEPC 63/23/Add.1), the December 2012 IMO Marine Environmental Protection Committee Circular (MEPC.2/Circ.18), or the December 2013 IMO Marine Environmental Protection Committee Circular (MEPC.2/Circ.19).

"Cat" = Pollution category.

"F" = Flammable (flash point less than or equal to  $60 \,^{\circ}$ C (140  $^{\circ}$ F).

"I" = An "oil" under MARPOL Annex I.

*Italicized* words are not part of the cargo name, but may be used in addition to the cargo name.

"LFG" = Liquid flammable gas.

"n.o.s." = Not otherwise specified.

"OS" = An "other substance" considered at present to pose no harm to marine resources, human health, amenities, or other legitimate uses of the sea when discharged into the sea from tank cleaning or deballasting operations.

"see" = A redirection to the preferred, alternative cargo name—for example, in "Diethyl ether, see Ethyl ether," the pollution category for "diethyl ether" will be found under the preferred, alternative cargo name "ethyl ether."

"ST" = Ship type, as defined in Chapter 2 of the IBC Code (2020).

"X," "Y," and "Z" = Noxious liquid substance categories under MARPOL Annex II.

# PART 150—COMPATIBILITY OF CARGOES

3. The authority citation for Part 150 is revised to read as follows:

Authority: 46 U.S.C. 3306, 3703; DHS Delegation No. 00170.1, Revision No. 01.3.

4. Revise Table 1 to Part 150 to read as follows:

Table 1 to Part 150—Alphabetical List of Cargoes

Chemical name	Group No.	Footnote	CAS No.	CHRIS Code	Related CHRIS Codes
Acetaldehyde	19		75-07-0	AAD	
Acetic acid	4	2	64-19-7	AAC	
Acetic anhydride	11	2	108-24-7	ACA	
Acetochlor	10		34256-82-1	ACG	
Acetone	18	2	67-64-1	ACT	
Acetone cyanohydrin	0	1, 2	75-86-5	ACY	
Acetonitrile	37		75-05-8	ATN	
Acetonitrile (low purity grade)	37	3	75-05-8	AIL	
Acetophenone	18		98-86-2	ACP	
Acid oil mixture from soyabean, corn (maize) and sunflower oil refining, see Oil, misc.: Acid mixture from soyabean, corn (maize), and sunflower oil refining		3			AOM
Acrolein	19	2	107-02-8	ARL	
Acrylamide solution (50% or less)	10	3	79-06-1	AAM	AAO
Acrylic acid	4	2	79-10-7	ACR	
Acrylic acid/ethenesulfonic (alternately ethenesulphonic) acid copolymer with phosphonate groups, sodium salt solution	30	3		APG	
Acrylonitrile	15	2	107-13-1	ACN	
Acrylonitrile-Styrene copolymer dispersion in Polyether polyol	20		9003-54-7	ALE	
Adiponitrile	37		111-69-3	ADN	
Alachlor technical (90% or more)	33	3	15972-60-8	ALH	ALI
Alcohol (C12-C13, branched and linear) poly (4-8) propoxy sulfates (alternately sulphates), sodium salt 25-30% solution	41	3		ABL	

Alcohol (C9-C11) poly (2.5-9) ethoxylates	20	3	68439-46-3*	AET	ALY/APV/APW
Alcohol (C10-C18) poly (7) ethoxylates	20		85422-93-1	ALE	ALY/APV/APW
Alcohol (C6-C17) (secondary) poly (3-6) ethoxylates	20	3	84133-50-6*	AEA	AEB
Alcohol (C6-C17) (secondary) poly (7-12) ethoxylates	20	3	84133-50-6*	AEB	AEA
Alcohol (C12-C16) poly (1-6) ethoxylates	20	3	68551-12-2*	AED	AET/ALY/APW
Alcohol (C12-C16) poly (7-19) ethoxylates	20	3	68551-12-2*	APV	AET/ALY/APV
Alcohol (C12-C16) poly (20+) ethoxylates	20	3	68551-12-2*	APW	AET/ALY
Alcohol (C12-C15) poly () ethoxylate, see Alcohol (C12-C16) poly () ethoxylate.			68131-39-2*		
Alcohol polyethoxylates	20		68439-50-9*		AEA/AEB/AED/AET/ APV/APW
Alcohol polyethoxylates, secondary	20		84133-50-6*		AEA/AEB
Alcoholic beverages, n.o.s.	20	3	64-17-5	ABV	
Alcohols (C12+), primary, linear	20	3	112-53-8*	ASY	ALR/AYK/AYL
Alcohols (C8-C11), primary, linear, and essentially linear	20		111-87-5*	ALR	AYK/AYL
Alcohols (C12-C13), primary, linear, and essentially linear	20	3	112-53-8*	AYK	ALR/ASY/AYL
Alcohols (C14-C18), primary, linear, and essentially linear	20	3	112-72-1*	AYL	ALR/ASY/AYK
Alcohols (C13+)	20		112-70-9*	ALY	ASY/AYK
Including:					
Cetyl alcohol (Hexadecanol)	20		36653-82-4		
Oleyl alcohol (Octadecenol)	20		112-92-5		
Pentadecanol	20		629-76-5		
Tallow alcohol	20		99561-04-3		
Tetradecanol	20		112-72-1		
Tridecanol	20		112-70-9		
Alkanes (C10-C26), linear and branched (flash point >60 °C)	31	3	124-18-5*	ABD	

Alkanes (C10-C26), linear and branched (flash point ≤ 60 °C)	31	3	124-18-5*	ABE	
Alkanes (C6-C9)	31		110-54-3*	ALK	
Including:					
Heptanes	31		142-82-5		
Hexanes	31		110-54-3		
Nonanes	31		111-84-2		
Octanes	31		111-65-9		
iso- & cyclo-Alkanes (C10-C11)	31		34464-38-5*	AKI	
iso- & cyclo-Alkanes (C12+)	31		31807-55-3*	AKJ	
n-Alkanes (C9-C11)	31	3	111-84-2*		
n-Alkanes (C10+) (all isomers)	31		124-18-5*	ALV	ALJ
Including:					
Decanes	31		124-18-5		
Dodecanes	31		112-40-3		
Heptadecanes	31		629-78-7		
n-Paraffins (C10-C20)	31		124-18-5*	PFN	ALJ
Tridecanes	31		629-50-5		
Undecanes	31		1120-21-4		
Alkane (C14-C17) sulfonic (alternately sulphonic) acid, sodium salt solutions, see Sodium alkyl (C14-C17) sulfonates (alternately sulphonates) (60-65% solution)			85711-69-9	AKA	SAA (AKE/SSU)
Alkaryl polyethers (C9-C20)	41			AKP	
Alkenoic acid, polyhydroxy ester borated	0	1, 3		AAY	
Alkenyl (C11+) amide	10			AKM	
Alkenyl (C8+) amine, Alkenyl (C12+) acid ester mixture	34			AAA	
Alkenyl (C16-C20) succinic anhydride	11		32072-96-1*	AAH	
Alkyl acrylate-Vinyl pyridine copolymer in Toluene	32			AAP	
Alkyl amine (C17+)	7		4200-95-7*	AKY	

Alkylaryl phosphate mixtures (more than 40% Diphenyl tolyl phosphate, less than 0.02% orthoisomers)	34		78-31-9	ADP	
Alkylated (C4-C9) hindered phenols	21	3	98-54-4*	AYO	
Alkyl (C3-C4) benzenes	32		103-65-1*	AKC	
Including:					
Butylbenzenes	32	3	104-51-8		
Cumene	32		98-82-8		
Propylbenzenes	32		103-65-1		
Alkyl (C5-C8) benzenes	32		538-68-1*	AKD	
Including:					
Amylbenzenes	32		538-68-1		
Heptylbenzenes	32		2132-85-6		
Hexylbenzenes	32		1077-16-3		
Octylbenzenes	32		2189-60-8		
Alkyl (C9+) benzenes	32		1081-77-2*	AKB	
Including:					
Decylbenzenes	32		104-72-3		
Dodecylbenzenes	32		29986-57-0		
Nonylbenzenes	32		1081-77-2		
Tetradecylbenzenes	32		1459-10-5		
Tetrapropylbenzenes	32		635-11-0		
Tridecylbenzenes	32		123-02-4		
Undecylbenzenes	32		6742-54-7		
Alkyl benzene distillation bottoms	0	1, 3		ABB	
Alkylbenzene mixtures (containing at least 50% of Toluene)	32	3	108-88-3*	AZT	
Alkylbenzenes mixtures (containing naphthalene)	20			ALB	AZT
Alkylbenzene, Alkylindane, Alkylindene mixture (each C12-C17)	32			AIH	

Alkyl (C11-C17) benzene sulfonic (alternately sulphonic) acid	0	1, 3	50854-94-9*	ABN	ABS/ABQ
Alkylbenzene sulfonic (alternately sulphonic) acid (less than 4%)	0	1, 2	104-15-4*	ABQ	ABS/ABN
Alkylbenzene sulfonic (alternately sulphonic) acid, sodium salt solution	33		657-84-1*	ABT	
Alkyl/cyclo (C4-C5) alcohols	20			AAL	
Alkyl (C12+) dimethylamine	7	3	112-18-5*	ADM	
Alkyl dithiocarbamate (C19-C35)	34	3		ADB	
Alkyl dithiothiadiazole (C6-C24)	33			ADT	
Alkyl ester copolymer (C4-C20)	34			AES	AEQ
Alkyl ester copolymer in mineral oil	34			AEQ	AES
Alkyl (C7-C9) nitrates	34	2	20633-12-9*	AKN	ONE
Alkyl (C7-C11) phenol poly (4-12) ethoxylate	40			APN	NPE
Alkyl (C10-C15, C12 rich) phenol poly (4-12) ethoxylate	40			APX	APN
Alkyl (C4-C9) phenols	21		1638-22-8*	AYI	BLT/BTP/NNP/OPH
Alkylphenols (C10-C18, C12 rich)	21			ALP	AYI/DOL
Alkyl phenol sulfide (alternately sulphide) (C8-C40), see Alkyl (C8-C40) phenol sulfide (alternately sulphide)					AKS
Alkyl (C8-C40) phenol sulfide (alternately sulphide)	34			AKS	
Alkyl (C9-C15) phenyl propoxylate	40		9064-15-7*	AXL	
Alkyl (C8-C9) phenylamine in aromatic solvents	9			ALP	
n-Alkyl phthalates, see individual phthalates				AYS	
Alkyl polyglucoside solution, see individual polyglucoside solutions				AGD	AGL/AGM/AGN/AG O/AGP
Alkyl (C8-C10) polyglucoside solution (65% or less)	43	3	29836-26-8*	AGL	AGD/AGM/AGN/AG O/AGP
Alkyl (C8-C10)/(C12-C14):(40% or less/60% or more) polyglucoside solution (55% or less)	43	3	29836-26-8*	AGN	AGD/AGL AGM/AGO/AGP

Alkyl (C8-C10)/(C12-C14):(50%/50%) polyglucoside solution (55% or less)	43	3	29836-26-8*	AGO	AGD/AGL/AGN/AGP
Alkyl (C8-C10)/(C12-C14):(60% or more/40% or less) polyglucoside solution (55% or less)	43	3	29836-26-8*	AGP	AGD/AGL/AGM/AG N/AGO
Alkyl (C12-C14) polyglucoside solution (55% or less)	43	3	59122-55-3*	AGM	AGD/AGL/AGN/AG O/AGP
Alkyl (C12-C16) propoxyamine ethoxylates	8	3		AXE	LPE
Alkyl (C10-C20), saturated and unsaturated phosphite	34			AKL	
Alkyl succinic anhydride	11		4100-80-5*	AUA	
Alkyl sulfonic (alternately sulphonic) acid ester of phenol	34		91082-17-6	AKH	
Alkyl toluene	32		95-47-6*	AYL	AUS
Alkyl (C18+) toluenes	32	3	94135-42-9*	AUS	AYL
Alkyl (C18-C28) toluenesulfonic (alternately toluenesulphonic) acid	0	1, 3	3386-32-1*	AUU	
Alkyl (C18-C28) toluenesulfonic (alternately toluenesulphonic) acid, Calcium salts, borated	34	3		AUB	
Alkyl (C18-C28) toluenesulfonic (alternately toluenesulphonic) acid, Calcium salts, high overbase	33	3		AUC	
Alkyl (C18-C28) toluenesulfonic (alternately toluenesulphonic) acid, Calcium salts, low overbase	33	3		AUL	
Allyl alcohol	15	2	107-18-6	ALA	
Allyl chloride	15		107-05-1	ALC	
Aluminum (alternately, Aluminium) chloride/Hydrochloric acid solution, see "Aluminum (alternately, Aluminium) chloride/Hydrogen chloride solution"		1		AHS	AHG
Aluminum (alternately Aluminium) chloride/Hydrogen chloride solution	0	1, 3		AHG	AHS
Aluminum (alternately Aluminium) hydroxide/sodium hydroxide/sodium carbonate solution (40% or less)	5	3		AHN	

Aluminum sulfate (alternately Aluminium sulphate) solution	43	2	10043-01-3	ASX	ALM
Amine C-6, morpholine process residue	9			AOI	
Aminoethyldiethanolamine/Aminoethylethanolamine solution	8			ADY	
2-(2-Aminoethoxy) ethanol	8		929-06-6	AEX	
Aminoethylethanolamine	8		111-41-1	AEE	
N-Aminoethylpiperazine	7		140-31-8	AEP	
2-Amino-2-hydroxymethyl-1,3-propanediol solution	43		77-86-1	AHL	
2-Amino-2-methyl-1-propanol	8		124-68-5	APZ	APQ/APR
Ammonia, anhydrous	6		7664-41-7	AMA	
Ammonia, aqueous (28% or less Ammonia), see Ammonium hydroxide			1336-21-6		АМН
Ammonium bisulfite (alternately bisulphite) solution (70% or less)	43	2	10192-30-0	ABX	ASU
Ammonium chloride solution (less than 25%)	43	3	12125-02-9	AIS	AMC
Ammonium hydrogen phosphate solution	0	1	7783-28-0	AMI	
Ammonium hydroxide (28% or less Ammonia)	6		1336-21-6	AMH	
Ammonium lignosulfonate (alternately lignosulphonate) solution, see also Lignin liquor			8061-53-8	ALG	LNL
Ammonium nitrate solution (45% or less)	0	1	6484-52-2	AND	AMN/ANR/ANW
Ammonium nitrate solution (93% or less)	0	1	6484-52-2	ANW	AMN/AND/ANR
Ammonium nitrate/Urea solution (containing Ammonia), see Urea/Ammonium nitrate solution (containing 1% or more Ammonia)					UAS (ANU/UAT/UAU/UA V)
Ammonium nitrate/Urea solution (not containing Ammonia), see Urea/Ammonium nitrate solution (containing less than 1% Ammonia)					UAU (ANU/UAS/UAT/UA V)
Ammonium phosphate/Urea solution, see Urea/Ammonium phosphate solution					UAP (APP/URE)
Ammonium polyphosphate solution	43		68333-79-9	AMO	
Ammonium sulfate (alternately sulphate) solution	43		7783-20-2	ASW	AME/AMS

Ammonium sulfate (alternately sulphate) solution (20% or less)	43		7783-20-2	AME	AMS/ASW
Ammonium sulfide (alternately sulphide) solution (45% or less)	5	3	12135-76-1	ASS	ASF
Ammonium thiocyanate/Ammonium thiosulfate (alternately thiosulphate) solution	0	1		ACV	ACS
Ammonium thiosulfate (alternately thiosulphate) solution (60% or less)	43	3	7783-18-8	ATV	ATF
Amyl acetate (all isomers)	34	3	628-63-7	AEC	IAT/AML/AAS/AYA
Amyl acid phosphate	34		12789-46-7	AIA	
Amyl alcohol, primary	20	3	71-41-0	APM	AAI/AAL/AAN/APM/ IAA
n-Amyl alcohol	20	3	71-41-0	AAN	AAI/AAL/APM/ASE/I AA
sec-Amyl alcohol	20	3	584-02-1	ASE	AAI/AAL/AAN/APM/ IAA
tert-Amyl alcohol	20	3	75-85-4	AAL	AAI/APM/ASE/IAA
tert-Amyl ethyl ether	41		919-94-8	AER	
tert-Amyl methyl ether	41		994-05-8	AYE	
Amyl methyl ketone, see Methyl amyl ketone			110-43-0	AMJ	MAK (AMK)
Amylene, see Pentene (all isomers)			109-67-1	AMW	PTX (AMX/AMZ/PTE)
tert-Amylenes, see Pentene (all isomers)			513-35-9	AMZ	PTX (AMW)
Aniline	9		62-53-3	ANL	
Animal and Fish oils, n.o.s.	34			AFN	
Including:					
Cod liver oil	34		8001-69-2		
Lanolin	34		8006-54-0		
Neatsfoot oil	34		8002-64-0		
Pilchard oil	34				
Sperm oil	34		8002-24-2		

Animal and Fish acid oils and distillates, n.o.s.	34			AFA	
Including:					
Animal acid oil	34				
Fish acid oil	34				
Lard acid oil	34				
Mixed acid oil	34				
Mixed general acid oil	34				
Mixed hard acid oil	34				
Mixed soft acid oil	34				
Anthracene oil (Coal tar fraction), see Coal tar			65996-91-0	АНО	COR
Apple juice	43			APJ	
Argon, liquefied	0	1	7440-37-1	ARG	
Aryl polyolefin (C11-C50)	30			AYF	
Asphalt	33		8052-42-4	ASP	ACU
Asphalt blending stocks, roofers flux	33			ARF	
Asphalt blending stocks, straight run residue	33			ASR	
Asphalt emulsion	33			ASQ	
Asphalt, Kerosene, and other components	33			AKO	
Aviation alkylates (C8 paraffins and isoparaffins BPT 95-120 °C)	33	3	111-65-9	AVA	GAK/GAV
Barium long-chain (C11-C50) alkaryl sulfonate (alternately sulphonate)	34			BCA	
Barium long-chain alkyl (C8-C14) phenate sulfide (alternately sulphide)	34			ВСН	
Behenyl alcohol	20		661-19-8	BHY	
Benzene	32	2	71-43-2	BNZ	BHA/BHB/PYG
Benzene and mixtures having 10% Benzene or more	32			BHB	BHA/BNZ/PYG
Benzene hydrocarbon mixtures (containing Acetylenes) (having 10% Benzene or more)	32			ВНА	BHB/BNZ/PYG

Benzene/Toluene/Xylene mixtures (having 10% Benzene or more)	32			BTX	BHB/BNZ/PYG/TOL/ XLX/XLM/XLO/XLP
Benzenesulfonyl (alternately Benzenesulphonyl) chloride	0	1, 2	98-09-9	BSC	
Benzenetricarboxylic acid, trioctyl ester	34		89-04-3	BCE	
Benzyl acetate	34		140-11-4	BZE	
Benzyl alcohol	21		100-51-6	BAL	
Benzyl chloride	36		100-44-7	BCL	
Bio-fuel blends of Diesel/gas oil and Alkanes (C10-C26), linear and branched with a flash point >60 °C (>25% but <99% by volume)	33	3		BIF	BIG/BIH/BII/BIJ/BIK
Bio-fuel blends of Diesel/gas oil and Alkanes (C10-C26), linear and branched with a flash point ≤ 60 °C (>25% but <99% by volume)	33	3		BIG	BIF/BIH/BII/BIJ/BIK
Bio-fuel blends of Diesel/gas oil and FAME (>25% but <99% by volume)	34	3		BIH	BIF/BIG/BII/BIJ/BIK
Bio-fuel blends of Diesel/gas oil and vegetable oil (>25% but <99% by volume)	34	3		BII	BIF/BIG/BIH/BIJ/BIK
Bio-fuel blends of Gasoline and Ethyl alcohol (>25% but <99% by volume)	20	2, 3		BIJ	BIF/BIG/BIH/BII/BIK
Bis (2-ethylhexyl) terephthalate	34		6422-86-2	DHH	
Boronated Calcium sulfonate (alternately sulphonate)	34			BCU	
Brake fluid base mix: Poly (2-8) alkylene (C2-C3) glycols/Polyalkylene (C2-C10) glycols monoalkyl (C1-C4) ethers and their borate esters	20	3		BFY	
Brominated Epoxy Resin in Acetone	16			BER	
Bromochloromethane	36		74-97-5	BCM	
Butadiene (all isomers)	30		106-99-0	BDI	
Butadiene/Butylene mixtures (containing Acetylenes)	30			BBM	BBX/BDI/BTN/IBL
Butane (all isomers)	31		106-97-8	BMX	IBT/BUT
Butane/Propane mixture	31			BUP	LPG

1,4-Butanediol, see Butylene glycol			110-63-4	BDO	BUG
2-Butanone, see Methyl ethyl ketone		2	78-93-3		MEK
Butene oligomer	30			BOL	
Butene, see Butylenes (all isomers)			106-98-9		BUT/IBL
2-Butoxyethanol (58%)/Hyperbranched polyesteramide (42%) (mixture)	20				
Butyl acetate (all isomers)	34	3	123-86-4	BAX	BCN/BTA/BYA/IBA
Butyl acrylate (all isomers)	14	3	141-32-2	BAR	BAI/BTC
Butyl alcohol (all isomers)	20	2, 3	71-36-3	BAY	BAN/BAS/BAT/IAL
Butyl alcohol (iso-, n-, sec-, tert-), see Butyl alcohol (all isomers)		2	71-36-3		BAN/BAS/BAT/BAY/ IAL
Butylamine (all isomers)	7	3	109-73-9	BTY	BAM/BTL/BUA/IAM
Butylbenzene (all isomers), see Alkyl (C3-C4) benzenes		3	104-51-8	BBE	AKC
Butyl benzyl phthalate	34		85-68-7	ВРН	
Butyl butyrate (all isomers)	34	3	109-21-7	BBA	BIB/BUB
Butylene glycol	20	2	107-88-0	BUG	BDO
1,2-Butylene oxide	16		106-88-7	BTO	
Butylenes (all isomers)	30		106-98-9	BTN	IBL
n-Butyl ether	41	3	142-96-1	BTE	
n *-Butyl ether	41		142-96-1	BTE	
iso-Butyl formate, see Isobutyl formate		3	542-55-2	BFI	BFN/BFO
n-Butyl formate	34		592-84-7	BFN	BFI/BFO
Butyl heptyl ketone	18		19780-10-0	ВНК	
Butyl methacrylate	14		97-88-1	ВМН	BMI/BMN
Butyl methacrylate, Decyl methacrylate, Cetyl- Eicosyl methacrylate mixture, see Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture		3			DER (BMH/BMI/BMN/CE M)
Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture	14	3		DER	BMH/BMI/BMN/CE M
Butyl methyl ketone, see Methyl butyl ketone		2	591-78-6		MBJ (MBK/MIK)

Butyl phenol, Formaldehyde resin in Xylene	32				
n-Butyl propionate	34		209-669-5	BPN	
Butyl stearate	34		123-95-5	BST	
Butyl toluene	32		1595-05-7	BUE	
Butyraldehyde (all isomers)	19	3	123-72-8	BAE	BAD/BTR
Butyric acid	4		107-92-6	BRA	IBR
gamma-Butyrolactone	0	1, 2	96-48-0	BLA	
C9 Resinfeed (DSM)	32	2		CNR	
Calcium alkaryl sulfonate (alternately sulphonate) (C11-C50), see Calcium long-chain alkaryl sulfonate (alternately sulphonate) (C11-C50)		3		CAE	CAY
Calcium alkyl (C9) phenol sulfide (alternately sulphide), polyolefin phosphorosulfide (alternately phosphorosulphide) mixture	34			CPX.	
Calcium alkyl (C10-C28) salicylate	34	3		CAJ	
Calcium bromide solution, see Drilling brines			7789-41-5	CBI	DRB
Calcium alkyl salicylate, see Calcium long-chain alkyl salicylate (C13+), Calcium long-chain alkyl (C18-C28) salicylate, or Calcium alkyl (C10-C28) salicylate	34				CAJ/CAK/CAZ
Calcium bromide solution, see Drilling brines			7789-41-5	CBI	DRB
Calcium bromide/Zinc bromide solution, see Drilling brine (containing Zinc salts)					DZB
Calcium carbonate slurry	34		471-34-1	CSR	
Calcium chloride solution, see Drilling brines			10043-52-4	CCS	CLC
Calcium hydroxide slurry	5		1305-62-0	СОН	САН
Calcium hypochlorite solution (15% or less)	5	3	7778-54-3	CHU	CHY/CHZ
Calcium hypochlorite solution (more than 15%)	5	3	7778-54-3	CHZ	CHU/CHY
Calcium lignosulfonate (alternately lignosulphonate) solution, see also Lignin liquor			8061-52-7	CLL	LNL
Calcium long-chain alkaryl sulfonate (alternately sulphonate) (C11-C50)	34		722503-69-7	CAY	

Calcium long-chain alkyl (C8-C40) phenate, see Calcium long-chain alkyl (C5-C10) phenate or Calcium long-chain alkyl (C11-C40) phenate				CAQ	CAU/CAV (CAN/CAW)
Calcium long-chain alkyl (C5-C10) phenate	34	3		CAU	CAN/CAQ/CAV/CA W
Calcium long-chain alkyl (C5-C20) phenate	34			CAV	CAN/CAQ/CAU/CA W
Calcium long-chain alkyl (C11-C40) phenate	34	3		CAW	CAN/CAQ/CAU/CAV
Calcium long-chain alkyl phenate sulfide (alternately sulphide) (C8-C40)	34			СРІ	
Calcium long-chain alkyl phenolic amine (C8-C40)	9			CPQ	
Calcium long-chain alkyl (C18-C28) salicylate	34	3		CAJ	
Calcium long-chain alkyl salicylate (C13+)	34			CAK	CAJ/CAZ
Calcium nitrate solutions (50% or less)	34	3	10124-37-5	CNU	CNT
Calcium nitrate/Magnesium nitrate/Potassium chloride solution	34			CLM	CNT/CNU/MGN/MG O/PCS/PCU/PSD
Calcium salts of fatty acids	34		85251-71-4	CFF	
Calcium stearate	34		1592-23-0	CSE	
Calcium sulfonate (alternately sulphonate)/Calcium carbonate/Hydrocarbon solvent mixture	33			CSH	
Camelina oil, see Oil, misc.: Camelina		3	68956-68-3	CEL	
Camphor oil (light)	18		8008-51-3	СРО	
Canola oil, see Oil, edible: Rapeseed (low erucic acid containing less than 4% free fatty acids)			120962-03-0		ORO (ORP)
Caprolactam solution, see epsilon-Caprolactam (molten or aqueous solutions)			105-60-2	CLS	
epsilon-Caprolactam (molten or aqueous solutions)	22	3	105-60-2	CLU	CLS
Caramel solutions	43		8028-89-5	CML	
Carbolic oil	21		108-95-2	СВО	
Carbon dioxide (high purity)	0	1	124-38-9	CDH	CDO/CDQ
Carbon dioxide (reclaimed quality)	0	1	124-38-9	CDQ	CDH/CDO
Carbon dioxide, liquefied	0	1	124-38-9	CDO	CDH/CDQ

Carbon disulfide (alternately disulphide)	38		75-15-0	CBB	
Carbon tetrachloride	36	2	56-23-5	CBT	CBU
Cashew nut shell oil (untreated), see Oil, misc.: Cashew nut shell (untreated)			8007-24-7		OCN
Castor oil, see Oil, edible: Castor	34		8001-79-4		OCA (VEO).
Catoxid feedstock	36	2		CXF	
Caustic potash solution	5	2	1310-58-3	CPS	
Caustic soda solution	5	2	1310-73-2	CSS	
Cesium formate solution	43	3	3495-36-1	CSM	
Cetyl alcohol (Hexadecanol), see Alcohols (C13+)			36653-82-4		ALY (ASY/AYL)
Cetyl alcohol, see Alcohols (C13+)	20		36653-82-4		ALY (ASY/AYL)
Cetyl/Eicosyl methacrylate mixture	14	1		CEM	
Cetyl/Stearyl alcohol, see Alcohols (C13+)					ALY (ASY/AYL)
Chlorinated paraffins (C10-C13)	36		1002-69-3*	CLH	CLG/CLJ/CLQ
Chlorinated paraffins (C14-C17) (with 50% Chlorine or more, and less than 1% C13 or shorter chains)	36	3		CLJ	CLG/CLH/CLQ
Chlorinated paraffins (C14-C17) (with 52% Chlorine)	36			CLQ	CLG/CLH/CLJ
Chlorinated paraffins (C18+) with any level of chlorine	36		3386-33-2*	CLG	CLH/CLJ
Chlorine	0	1	7782-50-5	CLX	
Chloroacetic acid (80% or less)	4	3	79-11-8	СНМ	CHL/MCA
Chlorobenzene	36	2	108-90-7	CRB	
Chlorodifluoromethane, see Monochlorodifluoromethane			75-45-6	MCF	
2-Chloro-4-ethylamino-6-isopropylamino-5-triazine solution	0	1	287476-17-9	CET	
1-(4-Chlorophenyl)-4,4-dimethyl pentan-3-one	18	2	66346-01-8	CDP	
2- or 3-Chloropropionic acid	4		29617-66-1 or 107-94-8	СРМ	CLA/CLP
Chloroform	36		67-66-3	CRF	

Chlorohydrins (crude)	17	3	107-07-3*	CHD	
4-Chloro-2-methylphenoxyacetic acid, dimethylamine salt solution	9			CDM	
o-Chloronitrobenzene	42		88-73-3	CNO	CNP
Chlorosulfonic (alternately Chlorosulphonic) acid	0	1	7790-94-5	CSA	
<i>m</i> -Chlorotoluene	36	3	108-41-8	CTM	CHI/CRN/CTO
o-Chlorotoluene	36	3	95-49-8	СТО	CHI/CRN/CTM
p-Chlorotoluene	36	3	106-43-4	CRN	CHI/CTM/CTO
Chlorotoluenes (mixed isomers)	36	3	25168-05-2	CHI	CRN/CTM/CTO
Choline chloride solutions	20		67-48-1	ССО	
Citric acid (70% or less)	4	3	77-92-9	CIS	CIT
Clay slurry	43		1332-58-7	CLY	
Coal slurry	43		125612-26-2	COG	COA
Coal tar	33		8007-45-2	COR	OCT
Coal tar crude bases	33		65996-84-1	СТВ	
Coal tar distillate, see Naphtha: Coal tar solvent			65996-91-0	CDL	NCT (CTU)
Coal tar naphtha solvent, see Naphtha: Coal tar solvent			65996-91-0		NCT (CDL/CTU)
Coal tar pitch (molten)	33	3	65996-93-2	СТР	
Coal tar, high temperature	33		65996-89-6	СНН	
Cobalt naphthenate in solvent naphtha	34		61789-51-3	CNS	
Cocoa butter, see Oil, edible: Cocoa butter			8002-31-1		OCB (VEO)
Coconut oil, see Oil, edible: Coconut		2	8001-31-8		OCC (VEO)
Coconut oil, fatty acid, see Oil, misc.: Coconut fatty acid		2	61788-47-4		CFA
Coconut oil, fatty acid methyl ester, see Oil, misc.: Coconut fatty acid methyl ester		3	61788-59-8		OCM
Copper salt of long-chain (C17+) alkanoic acid	34			CUS	CFT
Copper salt of long-chain (C3-C16) fatty acid	34		3112-74-1*	CFT	CUS
Corn oil, see Oil, edible: Corn			8001-30-7		OCO (VEO)
Corn syrup	43		8029-43-4	CSY	

Cottonseed oil, see Oil, edible: Cottonseed			8001-29-4		OCS (VEO)
Cottonseed oil, fatty acid, see Oil, misc.: Cottonseed oil, fatty acid			68308-51-0	CFY	
Creosote	21	2		CCW	CCT/CWD
Creosote (coal tar)	21	2, 3	8001-58-9	CCT	CCW
Creosote (wood tar)	21	2, 3	8021-39-4	CWD	CCT/CCW
Cresol/Phenol/Xylenol mixture	21			CXX	
Cresols (all isomers)	21	3	1319-77-3	CRS	CFO/CFP/CRL/CRO/ CSC/CSO
Cresols with 5% or more Phenol, see Phenol				CFP	PHN (CFO/CRL/CRO/CRS/ CSO)
Cresols with less than 5% Phenol, see Cresols (all isomers)				CFO	CRS (CFP/CRL/CRO/CSO)
Cresylate spent caustic, see Cresylic acid, sodium salt solution		2		CSC	CYD
Cresylic acid	21		1319-77-3	CRY	
Cresylic acid, dephenolized	21		1319-77-3	CAD	CRY/CYN
Cresylic acid tar	21			CRX	
Cresylic acid with 5% or more phenol	21			CYN	CAD/CRY
Cresylic acid, sodium salt solution	5	2	34689-46-8	CYD	CSC
Crotonaldehyde	19	2	123-73-9	CTA	
Crude Isononylaldehyde, see Isononyldehyde (crude)			5435-64-3		INC
Crude Isopropanol	20		67-63-0		IPB (IPA/PAL)
Crude Piperazine, see Piperazine (crude)			110-85-0		PZC (PPZ/PIZ)
Cumene, see Alkyl(C3-C4) benzenes			98-82-8	CUM	AKD (PBY/PBZ)
1,5,9-Cyclododecatriene	30		4904-61-4	CYT	
Cycloheptane	31		291-64-5	CYE	
Cyclohexane	31		110-82-7	CHX	
Cyclohexane-1,2-dicarboxylic acid, diisononyl ester	34		166412-78-8	CDE	

Cyclohexane oxidation products, sodium salts solution	43			CYS	
Cyclohexanol	20		108-93-0	CHN	
Cyclohexanone	18	2	108-94-1	ССН	
Cyclohexanone/Cyclohexanol mixtures	18	2		CYX	
Cyclohexyl acetate	34		622-45-7	CYC	
Cyclopentadiene/Styrene/Benzene mixture	30			CSB	
1,3-Cyclopentadiene dimer (molten)	30	3	7313-32-8	CPD	DPT/DPV
Cyclopentane	31		287-92-3	CYP	
Cyclopentene	30		142-29-0	CPE	
<i>p</i> -Cymene	32		99-87-6	CMP	
Decahydronaphthalene	33		91-17-8	DHN	
Decaldehyde	19		112-31-2	DAY	IDA/DAL
iso-Decaldehyde, see Isodecaldehyde.			3085-26-5		
n-Decaldehyde	19		3085-26-5		
Decane (all isomers), see n-Alkanes (C10+) (all isomers)			124-18-5	DCC	ALV (ALJ)
Decanoic acid	4		334-48-5	DCO	NEA.
Decene	30		872-05-9	DCE	
Decyl acetate	34		112-17-4	DYA	
Decyl acrylate	14		2156-96-9	DAT	IAI/DAR
Decyl alcohol (all isomers)	20	2, 3	85566-12-7	DAX	ISA/DAN
Decyl/Dodecyl/Tetradecyl alcohol mixture	20	3	112-30-1*	DYO	DAN/DAX/DDN/ISA
Decylbenzene, see Alkyl (C9+) benzenes			104-72-3	DBZ	AKB
Decyloxytetrahydrothiophene dioxide	0	1	18760-44-6	DHT	
Detergent alkylate	32		68442-97-7	DKY	AKB/DBZ/DDB/TDB/ TRB/UDB
Dextrose solution, see Glucose solution			50-99-7	DTS	GLU
Diacetone alcohol	20	2	123-42-2	DAA	
Dialkyl (C10-C14) benzenes, see Alkyl (C9+) benzenes			55191-38-3*	DAB	AKB

Dialkyl (C8-C9) diphenylamines	9		101-67-7*	DAQ	
Dialkyl (C7-C13) phthalates	34		3648-21-3*	DAH	
Including:					
Di-(2-ethylhexyl) phthalate	34		117-81-7		
Diheptyl phthalate	34		3648-21-3		
Dihexyl phthalate	34		84-75-3		
Diisooctyl phthalate	34		131-20-4		
Diisodecyl phthalate	34		89-16-7		
Diisononyl phthalate	34		28553-12-0		
Dinonyl phthalate	34		84-76-4		
Dioctyl phthalate	34		117-84-0		
Ditridecyl phthalate	34		119-06-2		
Diundecyl phthalate	34		3648-20-2		
Dialkyl (C9-C10) phthalates, see Dialkyl (C7-C13) phthalates			84-76-4*	DLK	DLH (DAP/DHL/DHP/DID/ DIE/DIF/DIN/DIO/DI T/DOP/DPA/DTP/DU P)
Dialkyl thiophosphates sodium salts solution	34	3	26377-29-7*	DYH	
2,6-Diaminohexanoic acid phosphonate mixed salts solution	21			DBT	
Dibromomethane	36		74-95-3	DBH	
Dibutyl carbinol, see Nonyl alcohol (all isomers)			623-93-8		NNS (DBC/NNI/NNN)
Dibutyl hydrogen phosphonate	34		107-66-4	DHD	
Dibutyl phthalate	34		84-74-2	DPA	DIT
Dibutyl terephthalate	34	3	1962-75-0	DYE	
Dibutylamine	7		111-92-2	DBA	
Dibutylphenol (all isomers)	21			DBT	
Dibutylphenols	21		26967-68-0	DBT	
Di-tert-butylphenol	21		128-39-2	DBF	DBT/DBV/DBW

2,4-Di-tert-butylphenol	21		96-76-4	DBV	DBF/DBT/DBW
2,6-Di-tert-butylphenol	21	3	128-39-2	DBW	DBF/DBT/DBV
Dichlorobenzene (all isomers)	36	3	25321-22-6	DBX	DBM/DBO/DBP
3,4-Dichloro-1-butene	36		760-23-6	DCD	DCB
Dichlorodifluoromethane	36		75-71-8	DCF	
1,1-Dichloroethane	36		75-34-3	DCH	
Dichloroethyl ether	41	3	111-44-4	DYR	DEE
1,6-Dichlorohexane	36		2163-00-0	DHX	
2,2'-Dichloroisopropyl ether	41		63283-80-7	DCI	
Dichloromethane	36	2	75-09-2	DCM	
2,4-Dichlorophenol	21		120-83-2	DCP	
2,4-Dichlorophenoxyacetic acid/Diethanolamine salt solution	43		5742-19-8	DDE	
2,4-Dichlorophenoxyacetic acid/Dimethylamine salt solution (70% or less)	0	1, 2, 3	2008-39-1	DDA	DAD/DSX
2,4-Dichlorophenoxyacetic acid/Triisopropanolamine salt solution	43	2	34075-45-1	DTI	
1,1-Dichloropropane	36		78-99-9	DPB	DPC/DPL/DPP/DPX
1,2-Dichloropropane	36	2, 3	78-87-5	DPP	DPB/DPC/DPL/DPX
1,3-Dichloropropane	36		142-28-9	DPC	DPB/DPL/DPP/DPX
Dichloropropene (all isomers)	15		26952-23-8	DCW	DPF/DPU
1,3-Dichloropropene	15		542-75-6		DCW/DPF
Dichloropropene/Dichloropropane mixtures	15		8003-19-8	DMX	DCW/DPB/DPC/DPL/ DPP/DPU/DPX
2,2-Dichloropropionic acid	4		75-99-0	DCN	
Dicyclopentadiene, Resin Grade, 81-89%	30	3	77-73-6	DPV	CPD/DPT
Dicyclopentadiene, see 1,3-Cyclopentadiene dimer (molten)			77-73-6	DPT	CPD (DPV)
Diethanolamine	8	2	111-42-2	DEA	

Diethanolamine salt of 2,4-Dichlorophenoxyacetic acid solution, see 2,4-Dichlorophenoxyacetic acid, Diethanolamine salt solution			5742-19-8	DZZ	DDE
Diethylamine	7		109-89-7	DEN	
Diethylaminoethanol	8		100-37-8	DAE	
2,6-Diethylaniline	9		579-66-8	DMN	DIY
Diethylbenzene	32		25340-17-4	DEB	
Diethylene glycol	40	2	111-46-6	DEG	
Diethylene glycol butyl ether, see Poly (2-8)alkylene glycol monoalkyl (C1-C6) ether			112-34-5	DME	PAG
Diethylene glycol butyl ether acetate, see Poly (2-8)alkylene glycol monoalkyl (C1-C6) ether acetate			124-17-4	DEM	PAF
Diethylene glycol dibenzoate	34		120-55-8	DGZ	
Diethylene glycol dibutyl ether	40		112-73-2	DIG	
Diethylene glycol diethyl ether	40		112-36-7	DGS	
Diethylene glycol ethyl ether, see Poly (2-8)alkylene glycol monoalkyl (C1-C6) ether			111-90-0	DGE	PAG
Diethylene glycol ethyl ether acetate, see Poly (2-8)alkylene glycol monoalkyl(C1-C6) ether acetate			112-15-2	DGA	PAF
Diethylene glycol n-hexyl ether, see Poly (2-8)alkylene glycol monoalkyl(C1-C6) ether			112-59-4	DHE	PAG
Diethylene glycol methyl ether, see Poly (2-8)alkylene glycol monoalkyl(C1-C6) ether			111-77-3	DGM	PAG
Diethylene glycol methyl ether acetate, see Poly (2-8)alkylene glycol monoalkyl(C1-C6) ether acetate			629-38-9	DGR	PAF
Diethylene glycol phenyl ether	40		104-68-7	DGP	
Diethylene glycol phthalate	34		2202-98-4	DGL	
Diethylene glycol propyl ether, see Poly (2-8)alkylene glycol monoalkyl(C1-C6) ether			6881-94-3	DGO	PAG
Diethylenetriamine	7	2	111-40-0	DET	
Diethylenetriaminepentaacetic acid, pentasodium salt solution	43		140-01-2	DYS	

Diethylethanolamine, see Diethylaminoethanol			100-37-8		DAE
Diethyl ether	8		60-29-7	EET	
Diethyl hexanol, see Decyl alcohol (all isomers)			19398-78-8		DAX
Di-(2-ethylhexyl) adipate	34		103-23-1	DEH	
Di-(2-ethylhexyl) phosphoric acid	1		298-07-7	DEP	
Di-(2-ethylhexyl) phthalate, see Dialkyl (C7-C13) phthalate			117-81-7	DIE	DAH
Di-(2-ethylhexyl) terephthalate	34		6422-86-2	DHH	
Diethyl phthalate	34		84-66-2	DPH	
Diethyl sulfate (alternately sulphate)	34		64-67-5	DSU	
Diglycidyl ether of Bisphenol A	16		1675-54-3	BDE	
Diglycidyl ether of Bisphenol F	16		2095-03-6	DGF	
Diheptyl phthalate, see Dialkyl (C7-C13) phthalate			3648-21-3	DHP	DAH
Di-n-hexyl adipate	34		110-33-8	DHA	
Dihexyl phthalate, see Dialkyl (C7-C13) phthalate			84-75-3	DHL	
Diisobutyl carbinol, see Nonyl alcohol (all isomers)			108-82-7	DBC	NNS
Diisobutyl ketone	18		108-83-8	DIK	
Diisobutyl phthalate	34		84-69-5	DIT	DPA
Diisobutylamine	7		110-96-3	DBU	
Diisobutylene	30		25167-70-8	DBL	
Diisodecyl phthalate, see Dialkyl (C7-C13) phthalates			26761-40-0	DID	DAH
1,4-Dihydro-9,10-dihydroxy anthracene, disodium salt solution	5		73347-80-5	DDH	
Diisononyl adipate	34		33703-08-1	DNY	
Diisononyl phthalate, see Dialkyl (C7-C13) phthalates		2	28553-12-0	DIN	DAH
Diisooctyl phthalate, see Dialkyl (C7-C13) phthalate			27554-26-3	DIO	DAH/(DIE/DOP)
Diisopropanolamine	8		110-97-4	DIP	
Diisopropylamine	7		108-18-9	DIA	DNA
Diisopropylbenzene (all isomers)	32		25321-09-9	DIX	

Diisopropylnaphthalene	32		24157-81-1	DII	
1,4-Dihydro-9,10-dihydroxy anthracene, disodium salt solution	5		73347-80-5	DDH	
N,N-Dimethylacetamide	10		127-19-5	DAC	DLS
N,N-Dimethylacetamide solution (40% or less)	10	3	127-19-5	DLS	DAL
Dimethyl adipate	34		627-93-0	DLA	
Dimethylamine	7		124-40-3	DMA	DMC/DMG/DMY
Dimethylamine salt of 4-Chloro-2- methylphenoxyacetic acid solution, see 4-Chloro-2- methylphenoxyacetic acid, Dimethylamine salt solution			2039-46-5		CDM
Dimethylamine salt of 2,4-Dichlorophenoxyacetic acid solution, see 2,4-Dichlorophenoxyacetic acid, Dimethylamine salt solution (70% or less)			2008-39-1	DAD	DDA (DSX)
Dimethylamine solution (45% or less)	7	3	124-40-3	DMG	DMA/DMC/DMY
Dimethylamine solution (greater than 45% but not greater than 55%)	7	3	124-40-3	DMY	DMA/DMC/DMG
Dimethylamine solution (greater than 55% but not greater than 65%)	7	3	124-40-3	DMC	DMA/DMG/DMY
2,6-Dimethylaniline	9		87-62-7	DMM	DDL
Dimethylbenzene, see Xylenes		2	1330-20-7		XLX/XLM/XLO/XLP
Dimethylcyclicsiloxane hydrolyzate	34		541-05-9*	DXZ	
N,N-Dimethylcyclohexylamine	7		98-94-2	DXN	
Dimethyl disulfide (alternately disulphide)	0	1, 2, 3	624-92-0	DSK	
Dimethyldodecylamine, see N,N-Dimethyldodecylamine	7		112-18-5		DDY
N,N-Dimethyldodecylamine	7		112-18-5	DDY	
Dimethylethanolamine	8		108-01-0	DMB	
Dimethyl ether	41		115-10-6	DIM	
Dimethylformamide	10	2	68-12-2	DMF	
Dimethyl furan	41		625-86-5	DFU	
Dimethyl glutarate	34		1119-40-0	DGT	

Dimethyl hydrogen phosphite	34	2	868-85-9	DPI	
Dimethyl naphthalene sulfonic (alternately sulphonic) acid, sodium salt solution	34	2	27178-87-6	DNS	
Dimethyl octanoic acid	4		29662-90-6	DMO	
Dimethyl phthalate	34		131-11-3	DTL	
Dimethylpolysiloxane, see Polydimethylsiloxane			9016-00-6	DMP	
2,2-Dimethylpropane-1,3-diol (molten or solution)	20	3	126-30-7	DDI	
Dimethyl succinate	34		106-65-0	DSE	
Dinitrotoluene (molten)	42	3	121-14-2	DNM	DNL/DNU/DTT
Dinonyl phthalate, see Dialkyl (C7-C13) phthalates			84-76-4	DIF	DAH
Dioctyl phthalate, see Dialkyl (C7-C13) phthalates			117-84-0	DOP	DAH (DIE/DIO)
1,4-Dioxane	41		123-91-1	DOX	
Dipentene	30		138-86-3	DPN	
Diphenyl	32		92-52-4	DIL	
Diphenylamine (molten)	9		122-39-4	DAG	DAM
Diphenylamine, reaction product with 2,2,4-trimethylpentene	9		68921-45-9	DAK	
Diphenylamines, alkylated	9		68921-45-9	DAJ	
Diphenyl/Diphenyl ether mixtures	33		8004-13-5	DDO	
Diphenyl ether	41		101-84-8	DPE	
Diphenyl ether/Biphenyl ether mixture, see Diphenyl/Diphenyl ether mixture			8004-13-5		DDO
Diphenyl ether/Diphenyl phenyl ether mixture	41		8004-13-5	DOB	
Diphenylmethane diisocyanate	12	2	101-68-8	DPM	
Diphenyl oxide, see Diphenyl ether			101-84-8		DPE
Diphenylol propane-Epichlorohydrin resins	0	1	25068-38-6	DPR	
Di-n-propylamine	7		142-84-7	DNA	DIA
Dipropylene glycol	40		25265-71-8	DPG	
Dipropylene glycol butyl ether, see Poly (2-8)alkylene glycol monoalkyl (C1-C6) ether			29911-28-2	DBG	PAG
Dipropylene glycol dibenzoate	34		94-51-9	DGY	

Dipropylene glycol methyl ether, see Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether			34590-94-8	DPY	PAG
Distillates, flashed feed stocks	33		8002-05-9	DFF	
Distillates, straight run	33		68814-87-9	DSR	
Di-tert-butyl phenol	21			DBF	DBT/DBV/DBW
2,4-Di-tert-butyl phenol	21		96-76-4	DBV	DBF/DBT/DBW
2,6-Di-tert-butyl phenol	21		128-39-2	DBW	DBF/DBT/DBV
Dithiocarbamate ester (C7-C35)	34			DHO	
Ditridecyl adipate	34		16958-92-2	DTY	
Ditridecyl phthalate, see Dialkyl (C7-C13) phthalate			119-06-2	DTP	DAH
Diundecyl phthalate, see Dialkyl (C7-C13) phthalates			3648-20-2	DUP	DAH
Dodecane (all isomers), see n-Alkanes (C10+) (all isomers)			13475-82-6	DOF	ALV (ALJ/DOC)
tert-Dodecanethiol	20	2	25103-58-6	DDL	LRM
Dodecene (all isomers)	30	3	25378-22-7	DOZ	DDC/DOD
1-Dodecene, see Dodecene (all isomers)	30			DDC	DOZ
Dodecanol (all isomers), see Dodecyl alcohol (all isomers)		2	112-53-8	DDN	LAL
2-Dodecenylsuccinic acid, dipotassium salt solution	34		57195-28-5	DSP	
Dodecyl alcohol (all isomers)	20	2	112-53-8	DDN	ASK/ASY/LAL
Dodecylamine/Tetradecylamine mixture	7	2	124-22-1*	DTA	
Dodecylbenzene, see Alkyl (C9+) benzenes			123-01-3	DDB	AKB
Dodecylbenzenesulfonic (alternately Dedecylbenzenesulphonic) acid	0	1, 2	27176-87-0	DSA	
Dodecyldimethylamine/Tetradecyldimethylamine mixture	7		112-18-5*	DOT	
Dodecyl diphenyl ether disulfonate (alternately disulphonate) solution	43		25167-32-2	DTA	
Dodecyl hydroxypropyl sulfide (alternately sulphide)	0	1	67124-09-8	DOH	
n-Dodecyl mercaptan	21		112-55-0	DBT	

Dodecyl methacrylate	14		142-90-5	DDM	
Dodecyl/Octadecyl methacrylate mixture	14		142-90-5*	DOM	DDM
Dodecyl/Pentadecyl methacrylate mixture	14		142-90-5*	DDP	
Dodecyl phenol	21		27193-86-8	DOL	
Dodecyl xylene	32		66697-27-6	DXY	
Drilling brines (containing Calcium, Potassium or Sodium salts)	43			DRL	DRB/DRS
Drilling brines (containing Zinc salts)	43			DZB	DRB
Drilling brines, including: Calcium bromide solution, Calcium chloride solution and Sodium chloride solution	43	3			DRS/DRL
Drilling mud (low toxicity) (if flammable or combustible)	33			DRO	DRM/DRN/DRP
Drilling mud (low toxicity) (if non-flammable or non-combustible)	43			DRP	DRM/DRN/DRO
Epichlorohydrin	17		106-89-8	EPC	
Epoxy resin	16			EPN	
ETBE, see Ethyl tert-butyl ether			637-92-3		EBE
Ethane	31		74-84-0	ETH	
Ethanolamine	8		141-43-5	MEA	
2-Ethoxyethanol, see Ethylene glycol monoalkyl ethers			110-80-5	EEO	EGC (EGE)
2-Ethoxyethyl acetate	34	2	111-15-9	EEA	EGA
Ethoxylated alkyloxy alkyl amine	8		68155-39-5	ELM	
Ethoxylated alcohols, C11-C15, see alcohol polyethoxylates			9002-92-0		AEA/AEB/AED/AET/ APV/APW/APX
Ethoxylated long-chain (C16+) alkyloxyalkylamine	8			ELA	
Ethoxylated tallow alkyl amine	7		61791-26-2	TAY	TAG/TAR
Ethoxylated tallow alkyl amine, glycol mixture	7			TAG	TAR/TAY
Ethoxylated tallow amine (> 95%)	7	3	61791-26-2	TAR	TAG/TAY
Ethoxy triglycol, see Poly (2-8)alkylene glycol monoalkyl (C1-C6) ether			112-50-5	ETG	PAG (ETR/TGE)

Ethoxy triglycol (crude)	40		112-50-5	ETR	
Ethyl acetate	34	2	141-78-6	ETA	
Ethyl acetoacetate	34		141-97-9	EAA	
Ethyl acrylate	14	2	140-88-5	EAC	
Ethyl alcohol	20	2	64-17-5	EAL	
Ethylamine	7	2	75-04-7	EAM	EAN/EAO.
Ethylamine solution (72% or less)	7	3	75-04-7	EAN	EAM/EAO
Ethyl amyl ketone	18		106-68-3	EAK	ELK
Ethylbenzene	32		100-41-4	ETB	
Ethyl butanol	20		97-95-0	EBT	
N-Ethylbutylamine	7		13360-63-9	EBA	
Ethyl tert-butyl ether	41	2	637-92-3	EBE	
Ethyl butyrate	34		105-54-4	EBR	
Ethyl chloride	36		75-00-3	ECL	
Ethyl cyclohexane	31		1678-91-7	ECY	
N-Ethylcyclohexylamine	7		5459-93-8	ECC	
2-Ethyl-2-(2,4-dichlorophenoxy) acetate	34		533-23-3	EDY	
2-Ethyl-2-(2,4-dichlorophenoxy) propionate	34		58048-39-8	EDP	
S-Ethyl dipropylthiocarbamate	34	3	759-94-4	ECB	
Ethylene	30		74-85-1	ETL	
Ethyleneamine EA 1302	7	2	593-67-9	EMX	
Ethylene carbonate	34		96-49-1	ECR	
Ethylene chlorohydrin	20		107-07-3	ECH	
Ethylene cyanohydrin	20	2	109-78-4	ETC	
Ethylenediamine	7	2	107-15-3	EDA	EMX
Ethylenediaminetetraacetic acid/tetrasodium salt solution	43		64-02-8	EDS	
Ethylene dibromide	36		106-93-4	EDB	
Ethylene dichloride	36	2	107-06-2	EDC	
Ethylene glycol	20	2	107-21-1	EGL	EAG

Ethylene glycol acetate	34		542-59-6	EGO	
Ethylene glycol butyl ether, see Ethylene glycol monoalkyl ethers			111-76-2	EGM	EGC
Ethylene glycol tert-butyl ether, see Ethylene glycol monoalkyl ethers			7580-85-0	EGG	EGC
Ethylene glycol butyl ether acetate	34		112-07-2	EMA	
Ethylene glycol diacetate	34		111-55-7	EGY	
Ethylene glycol dibutyl ether	40		112-48-1	EGB	
Ethylene glycol ethyl ether, see Ethyl glycol monoalkyl ethers			110-80-5	EGE	EGC/EEO
Ethylene glycol ethyl ether acetate, see 2- Ethoxyethyl acetate		2	111-15-9	EGA	EEA
Ethylene glycol hexyl ether, see Ethylene glycol monoalkyl ethers			112-25-4	EGH	EGC
Ethylene glycol isobutyl ether, see Ethylene glycol monoalkyl ethers			224-658-5		EGC (EGG/EGM)
Ethylene glycol isopropyl ether, see Ethylene glycol monoalkyl ethers			109-59-1	EGI	EGC
Ethylene glycol methyl butyl ether, see Ethylene glycol monoalkyl ethers			13343-98-1	EMB	EGC
Ethylene glycol methyl ether, see Ethylene glycol monoalkyl ethers			109-86-4	EME	EGC
Ethylene glycol methyl ether acetate	34		110-49-6	EGT	
Ethylene glycol monoalkyl ethers	40	2		EGC	
Including:					
Ethylene glycol butyl ether	40		111-76-2		
Ethylene glycol tert-butyl ether	40		7580-85-0		
Ethylene glycol ethyl ether	40		111-15-9		
Ethylene glycol hexyl ether	40		112-25-4		
Ethylene glycol isobutyl ether	40		224-658-5		
Ethylene glycol isopropyl ether	40		109-59-1		
Ethylene glycol methyl ether	40		109-86-4		

Ethylene glycol methyl butyl ether	40		13343-98-1		
Ethylene glycol propyl ether	40		2807-30-9		
Ethylene glycol phenyl ether	40		122-99-6	EPE	
Ethylene glycol phenyl ether/Diethylene glycol phenyl ether mixture	40		122-99-6 / 104 68 7	EDX	
Ethylene glycol propyl ether, see Ethylene glycol monoalkyl ethers			2807-30-9	EGP	EGC/EGI/EGN
Ethylene glycol n-propyl ether, see Ethylene glycol monoalkyl ethers			2807-30-9	EGN	EGC (EGI/EGP)
Ethylene glycol (>75%)/Sodium alkyl carboxylates/borax mixture	20			EBX	
Ethylene glycol (>85%)/Sodium alkyl carboxylates mixture	20			ESX	
Ethylene oxide	0	1	75-21-8	EOX	
Ethylene oxide/Propylene oxide mixture	16		75-21-8 / 75-56-9	EPF	EPM
Ethylene oxide/Propylene oxide mixture with an Ethylene oxide content not more than 30% by mass	16	3	75-21-8 / 75-56-9	EPM	EPF
Ethylene-Propylene copolymer (in liquid mixtures)	31		9010-79-1	EPY	
Ethylene-Vinyl acetate copolymer (emulsion)	43		24937-78-8	ECV	
Ethyl ether, see Diethyl ether			60-29-7		EET
Ethyl-3-ethoxypropionate	34		763-69-9	EEP	
2-Ethylhexaldehyde, see Octyl aldehydes			123-05-7	EHA	OAL (OLX)
2-Ethylhexanoic acid, see Octanoic acid (all isomers)			149-57-5	ЕНО	OAY (OAA)
2-Ethylhexanol, see Octanol			104-76-7	EHX	OCA (OTA)
2-Ethylhexyl acrylate	14		103-11-7	EAI	
2-Ethylhexylamine	7		104-75-6	EHM	
Ethyl hexyl phthalate	34		117-81-7	EHE	
Ethyl hexyl tallate	34		68334-13-4	EHT	
2-Ethyl-2-(hydroxymethyl) propane-1,3-diol (C8-C10) ester	34		77-99-6	EHD	
Ethyl lactate	34		97-64-3	ELT	

Ethylidene norbornene	30	2	16219-75-3	ENB	
Ethyl methacrylate	14		97-63-2	ETM	
N-Ethylmethylallylamine	7		18328-90-0	EML	
Ethyl propionate	34		105-37-3	EPR	
2-Ethyl-3-propylacrolein	19	2	645-62-5	EPA	
2-Ethyl-6-methyl-N-(1'-methyl-2-methoxyethyl)aniline	9		51219-00-2	EEM	
o-Ethyl phenol	21		90-00-6	EPL	
Ethyl toluene	32		25550-14-5	ETE	
Fatty acid methyl esters	34	3	67762-38-3	FME	
Fatty acids (C8-C10)	34	3	124-07-2*	FDS	
Fatty acids (C12+)	34	3	143-07-7*	FDT	FAB/FAD/FAI/FDI
Fatty acids (saturated, C13+)	34		700041-79-8	FAB	FAD
Fatty acids (saturated, C14+), see Fatty acids (saturated, C13+)			700041-79-8	FAD	FAB
Fatty acids (C16+)	34	3	57-10-3*	FDI	
Fatty acids, essentially linear (C6-C18) 2-ethylhexyl ester	34	2, 3		FAE	
Ferric chloride solution	1		7705-08-0	FCS	FCL
Ferric hydroxyethylethylenediaminetriacetic acid, trisodium salt solution	43	2		FHX	STA
Ferric nitrate/Nitric acid solution	3	2	7782-61-8	FNN	
Fish oil, see Oil, edible: Fish		2	8016-13-5		OFS (AFN)
Fish protein concentrate (containing 4% or less formic acid)	4			FPC	
Fish silage protein concentrate (containing 4% or less formic acid)	4			FSC	
Fish solubles (water based fish meal extracts)	43			FSO	
Fluorosilicic acid (20-30%) in water solution	1	3	16961-83-4	FSK	FSJ/FSL/HFS
Fluorosilicic acid (30% or less)	1		16961-83-4	FSJ	FSK/FSL/HFS
Formaldehyde (50% or more), Methanol mixtures	19	2	50-00-0	MTM	

Formaldehyde solutions (37%-50%)	19	2	50-00-0	FMS	FMG/FMR
Formaldehyde solutions (45% or less)	19	2, 3	50-00-0	FMR	FMG/FMS
Formamide	10		75-12-7	FAM	
Formic acid	4	2	64-18-6	FMA	FMB.
Formic acid (85% or less)	4	2	64-18-6	FMB	FMA
Formic acid (over 85%)	4	2, 3	64-18-6	FMD	
Formic acid mixture (containing up to 18% Propionic acid and up to 25% Sodium formate)	4	2, 3	64-18-6	FMC	FMA/FMB
Fructose solution	43		57-48-7	FTS	FRT
Fumaric adduct of Rosin, water dispersion	43		65997-04-8	FAR	
Fuming sulfuric (alternately sulphuric) acid, see Oleum		2	8014-95-7		
Furfural	19		98-01-1	FFA	
Furfuryl alcohol	20	2	98-00-0	FAL	
Gas oil, cracked, see Oil, misc.: Gas, cracked			64741-62-4		GOC
Gasoline blending stock, alkylates	33		64741-64-6	GAK	
Gasoline blending stock, reformates	33		8006-61-9	GRF	
Gasolines:					
Automotive (containing not more than 4.23 grams lead per gal.)	33		86290-81-5	GAT	
Aviation (containing not more than 4.86 grams lead per gal.)	33			GAV	AVA
Casinghead (natural)	33		68425-31-0	GCS	
Polymer	33		8006-61-9	GPL	
Straight run	33		68606-11-1	GSR	
Gasolines: Pyrolysis (containing Benzene), see Pyrolysis gasoline (containing Benzene)			68477-58-7	GPY	PYG
Glucitol/Glycerol blend propoxylated (containing less than 10% amines)	40	3		GGA	
Glucitol/Glycerol blend propoxylated (containing 10% or more amines)	40			GGB	

Glucose solution	43		50-99-7	GLS	DTS
Glutaraldehyde solutions (50% or less)	19		111-30-8	GTA	
Glycerine	20	2	56-81-5	GCR	
Glycerine (83%)/Dioxanedimethanol (17%) mixture	20			GDN	GDM
Glycerol, see Glycerine		2	56-81-5		GCR
Glycerol ethoxylated	40		31694-55-0	GXA	
Glycerol monooleate	20		25496-72-4	GMO	
Glycerol polyalkoxylate	40		700038-65-9	GPA	
Glycerol propoxylated	40	3	25791-96-2	GXP	
Glycerol, propoxylated and ethoxylated	40	3	9082-00-2	GXE	
Glycerol/Sucrose blend propoxylated and ethoxylated	40	3		GSB	
Glyceryl triacetate	34		102-76-1	GCT	
Glycidyl ester of C10 trialkyl acetic acid	34			GLU	GLT
Glycidyl ester of tertiary carboxylic acid, see Glycidyl ester of C10 trialkyl acetic acid				GLT	GLU
Glycidyl ester of tridecyl acetic acid, see Glycidyl ester of C10 trialkyl acetic acid				GLT	GLU
Glycidyl ester of Versatic acid, see Glycidyl ester of C10 trialkyl acetic acid				GLT	GLU
Glycine, sodium salt solution	7		56-40-6	GSS	
Glycol diacetate, see Ethylene glycol diacetate			111-55-7		EGY
Glycol mixture, crude	20		107-21-1	GMC	
Glycol triacetate, see Glyceryl triacetate			102-76-1		GCT
Glycolic acid solution (70% or less)	4	3	79-14-1	GLC	
Glyoxal solution (40% or less)	19	3	107-22-2	GOS	
Glyoxylic acid solution (50% or less)	4	3	298-12-4	GAC	
Glyphosate solution (not containing surfactant)	7		1071-83-6	GIO	RUP
Grape Seed Oil, see Oil, edible: Grape seed			8024-22-4		
Groundnut oil, see Oil, edible: Groundnut			8002-03-7		OGN (VEO)
Hazelnut oil, see Oil, edible: Hazelnut			84012-21-5		OHN (VEO)

Heptadecane (all isomers), see n-Alkanes (C10+) (all isomers)			629-78-7		ALV (ALJ)
Heptane (all isomers), see Alkanes (C6-C9)			142-82-5	HMX	ALK(HPI/HPT)
n-Heptanoic acid	4		111-14-8	HEN	HEP
Heptanol (all isomers)	20	3	111-70-6	HTX	HTN
Heptene (all isomers)	30	2, 3	592-76-7	HPX	THE
Heptyl acetate	34		112-06-1	HPE	
Heptylbenzenes, see Alkyl (C5-C8) benzenes			1078-71-3		AKD
Herbicide (C15-H22-NO2-Cl), see Metolachlor			51218-45-2		MCO
Hexadecanol (Cetyl alcohol), see Alcohols (C13+)			36653-82-4		ALY (ASY/AYL)
1-Hexadecylnaphthalene/1,4- bis(Hexadecyl)naphthalene mixture	32		56388-47-7*	HNH	HNI
1-n-Hexadecylnaphthalene (90%)/1,4-di-n- (Hexadecyl)naphthalene (10%)	32		56388-47-7*	HNI	HNH
Hexaethylene glycol, see Polyethylene glycol			2615-15-8	HMG	PEG
1,3,5-Hexahydrotriethanol-1,3,5-triazine solution	9			HES	
Hexahydro-1,3,5-trimethyl-1,3,5-triazine solution (45% or less)	9			HET	
Hexamethylene diisocyanate	12		822-06-0	HMS	HDI
Hexamethylene glycol	20		629-11-8	HMG	HXG
Hexamethylenediamine (molten)	7	3	124-09-4	HME	HMD/HMC
Hexamethylenediamine adipate (50% in water)	43		15511-81-6	HAM	HAN
Hexamethylenediamine adipate solution	43		15511-81-6	HAN	HAM
Hexamethylenediamine solution	7		124-09-4	HMC	HMD/HME
Hexamethyleneimine	7		111-49-9	HMI	
Hexamethylenetetramine solutions	7		100-97-0	HTS	HMT
Hexane (all isomers), see Alkanes (C6-C9)		2	110-54-3	HXS	ALK (IHA/HXA)
1,6-Hexanediol, distillation overheads	4	2, 3	629-11-8	HDO	
Hexanoic acid	4		142-62-1	НХО	
Hexanol	20		111-27-3	HXM	HEW/HEZ/HXN

Hexene (all isomers)	30	2, 3	592-41-6	HEX	HXE/HXT/HXU/HXV /MPN/MTN
Hexyl acetate	34		142-92-7	HAE	
Hexylbenzenes, see Alkyl (C5-C8) benzenes			1077-16-3		AKD
Hexylene glycol, see Hexamethylene glycol			107-41-5	HXG	HMG
Hog grease, see Lard			61789-99-9		LRD
Hydrochloric acid	1		7647-01-0	HCL	
Hydrofluorosilicic acid (25% or less), see Fluorosilicic acid (30% or less)			16961-83-4		FSJ(FSK/FSL/HFS)
bis(Hydrogenated tallow alkyl)methyl amines	7		61788-63-4	HTA	
Hydrogen peroxide solutions (over 8% but not more than 60% by mass)	0	1, 3	7722-84-1	HPN	HPO/HPS
Hydrogen peroxide solutions (over 60% but not more than 70% by mass)	0	1, 3	7722-84-1	HPS	HPN/HPO
Hydrogenated starch hydrolysate	0	1, 3	68425-17-2	HSH	
2-Hydroxyethyl acrylate	14	2	818-61-1	HAI	
N-(Hydroxyethyl)ethylenediamine triacetic acid, trisodium salt solution	43		207386-87-6	HET	
N,N-bis(2-Hydroxyethyl) oleamide	10		93-83-4	НОО	
2-Hydroxy-4-(methylthio)butanoic acid	4		583-91-5	HBA	
Hydroxyl terminated polybutadiene, see Polybutadiene, hydroxyl terminated			69102-90-5		РНТ
alpha-Hydro-omega- hydroxytetradeca(oxytetramethylene)	40			НТО	PYS/PYT
Illipe oil, see Oil, edible: Illipe			68956-68-3		ILO (VEO)
Isoamyl alcohol	20	3	123-51-3	IAA	AAI/AAL/AAN/APM/ ASE
Isobutyl alcohol	20	2, 3	78-83-1	IAL	BAN/BAS/BAT/BAY
Isobutyl formate	34	3	542-55-2	BFI	BFN/BFO
Isobutyl methacrylate	14	3	97-86-9	BMI	BMH/BMN
Isodecaldehyde	19		3085-26-5		
Isononylaldehyde (crude)	19		5435-64-3	INC	

Isophorone	18	2	78-59-1	IPH	
Isophoronediamine	7		2855-13-2	IPI	
Isophorone diisocyanate	12		4089-71-9	IPD	
Isoprene (all isomers)	30		78-79-5	IPR	
Isoprene (part refined)	30		78-79-5	IPS	IPR/ISC
Isoprene concentrate (Shell)	30		78-79-5	ISC	
Isopropanolamine	8	3	78-96-6	MPA	IPF/PAX/PLA
Isopropanolamine solution	8	3	78-96-6	PAI	MPA/PAY/PLA/PRG
Isopropyl acetate	34	3	108-21-4	IAC	PAT
Isopropyl alcohol	20	2, 3	67-63-0	IPA	IPB/PAL
Isopropylamine	7	3	75-31-0	IPP	IPO/IPQ/PRA
Isopropylamine (70% or less) solution	7	3	75-31-0	IPQ	IPO/IPP/PRA
Isopropylbenzene, see Alkyl (C3-C4) benzenes			98-82-8		AKC(CUM/PBY/PBZ
Isopropylcyclohexane	31	3	696-29-7	IPX	
Isopropyl ether	41	3	108-20-3	IPE	PRL/PRN
Jatropha oil, see Oil, misc.: Jatropha			88-6-7		JTO
Jet fuels:				JPO	JPT/JPF/JPV
JP-4	33		50815-00-4	JPF	
JP-5	33		8008-20-6	JPV	
JP-8	33		8008-20-6	JPE	
Kaolin clay solution/suspension	43		1332-58-7	KLC	KLS
Kaolin slurry	43		1332-58-7	KLS	KLC
Kerosene	33		8008-20-6	KRS	
Ketone residue	18			KTR	
Kraft black liquor	5		66071-92-9	KBL	KPL
Kraft pulping liquors (free alkali content 3% or more) (Black, Green, or White)	5		68131-33-9	KPL	KBL
Lactic acid	0	1, 2	79-33-4	LTA	
Lactonitrile solution (80% or less)	37	3	78-97-7	LNI	

Lard	34		61789-99-9	LRD	OLD
Latex, ammonia (1% or less)-inhibited	30	3	98-82-8	LTX	
Latex: Carboxylated Styrene-Butadiene copolymer; Styrene-Butadiene rubber	43	3	98-82-8	LCC	LCB/LSB
Latex, liquid synthetic	43		98-82-8	LLS	LCB/LCC/LSB
Lauric acid	34		143-07-7	LRA	
Lauric acid methyl ester/Myristic acid methyl ester mixture	34		111-82-0	LMM	
Lauryl polyglucose, see Alkyl (C12-C14) polyglucoside solution (55% or less)			59122-55-3		AGM/LAP
Lauryl polyglucose (50% or less), see Alkyl (C12-C14) polyglucoside solution (55% or less)			59122-55-3	LAP	AMG
Lecithin	34		8002-43-5	LEC	
Lignin liquor	43		9005-53-2	LNL	ALG/CLL/LGA/LGM/ LSL/SHC/SHP/SHQ/S LP
Ligninsulfonic (alternately Ligninsulphonic) acid, magnesium salt solution	43	3	9009-75-0	LGM	LGA/LNL/LSL
Ligninsulfonic (alternately Ligninsulphonic) acid, sodium salt solution, see Lignin liquor or Sodium lignosulfonate (alternately lignosulphonate) solution			8061-51-6	LGA	LNL or SLG
d-Limonene, see Dipentene			5989-27-5		DPN
Linear alkyl (C12-C16) propoxyamine ethoxylate	8		68213-26-3	LPE	
Linseed oil, see Oil, misc.: Linseed			8001-26-1		OLS
Liquefied Natural Gas, see Methane			74-82-8	LNG	MTH
Liquid chemical wastes	0	1, 3		LCW	
Liquid Streptomyces solubles	43				
Long-chain alkaryl polyether (C11-C20)	41			LCP	
Long-chain alkaryl sulfonic (alternately sulphonic) acid (C16-C60)	0	1		LCS	
Long-chain alkyl amine	7		61789-79-5	LAA	

Long-chain alkylphenate/Phenol sulfide (alternately sulphide) mixture	21			LPS	
Long-chain alkylphenol (C14-C18)	21			LCA	
Long-chain alkylphenol (C18-C30)	21			LCK	
Long-chain alkyl (C13+) salicylic acid	4		69-72-7	LAS	
Long-chain polyetheramine in alkyl (C2-C4)benzenes	7			LCE	
L-Lysine solution (60% or less)	43	3	25988-63-0	LYS	
Magnesium chloride solution	0	1, 2	7786-30-3	MGL	
Magnesium hydroxide slurry	5		1309-42-8	MHS	
Magnesium long-chain alkaryl sulfonate (alternately sulphonate) (C11-C50)	34		115254-47-2*	MAS	MSE
Magnesium long-chain alkyl phenate sulfide (alternately sulphide) (C8-C20)	34			MPS	
Magnesium long-chain alkyl salicylate (C11+)	34			MLS	
Magnesium nitrate solution (66.7%)	43		13446	MGP	MGN/MGO
Magnesium nonyl phenol sulfide (alternately sulphide), see Magnesium long-chain alkyl phenate sulfide (alternately sulphide) (C8-C20)					MPS
Magnesium sulfonate (alternately sulphonate), see Magnesium long-chain alkaryl sulfonate (alternately sulphonate) (C11-C50)			71786-47-5	MSE	MAS
Maleic anhydride	11		108-31-6	MLA	
Maleic anhydride/sodium allylsulphonate copolymer solution	11				PHN (CFO/CRL/CRO/CRS/ CSO)
Maltitol solution	0	1, 3	585-88-6	MTI	
Mango kernel oil, see Oil, edible: Mango kernel			90063-86-8		MKO (VEO)
Mercaptobenzothiazol, sodium salt solution	5		149-30-4	SMB	MBT
2-Mercaptobenzothiazol (in liquid mixture)	5		149-30-4	BTM	SMD
Mesityl oxide	18	2	141-79-7	MSO	
Metam sodium solution	7		137-42-8	MSS	SMD

Methacrylic acid	4		79-41-4	MAD	
Methacrylic acid - Alkoxypoly(alkylene oxide) methacrylate copolymer, sodium salt aqueous solution (45% or less)	20	3	79-41-4	MAQ	
Methacrylic resin in ethylene dichloride	14			MRD	
Methacrylonitrile	15	2	126-98-7	MET	
Methane	31		74-82-8	MTH	LNG
3-Methoxy-1-butanol	20		2517-43-3	MTX	
3-Methoxybutyl acetate	34		4435-53-4	MOA	
N-(2-Methoxy-1-methyl ethyl)-2-ethyl-6-methyl chloroacetanilide, <i>see</i> Metolachlor	34		51218-45		МСО
1-Methoxy-2-propyl acetate	34		108-65-6	MXP	
Methoxy triglycol, see Poly (2-8)alkylene glycol monoalkyl (C1-C6) ether			112-35-6	MTG	PAG (TGY)
Methyl acetate	34		79-20-9	MTT	
Methyl acetoacetate	34		105-45-3	MAE	
Methyl acetylene/Propadiene mixture	30		74-99-7	MAP	
Methyl acrylate	14		96-33-3	MAM	
Methyl alcohol	20	2	67-56-1	MAL	
Methylamine solutions (42% or less)	7	3	74-89-5	MSZ	
Methyl amyl acetate	34		7789-99-3	MAC	
Methyl amyl alcohol	20		108-11-2	MAA	MIC
Methyl amyl ketone	18		110-43-0	MAK	
N-Methylaniline	9	3	100-61-8	MAN	
alpha-Methylbenzyl alcohol with Acetophenone (15% or less)	20	3	98-85-1	MBA	
Methyl bromide	36		74-83-9	MTB	
Methyl butanol, see the Amyl alcohols			71-41-0		AAI/AAL/AAN/APM/ ASE/IAA
Methyl butenes, see Pentene (all isomers)			109-67-1		PTX (AMW/AMZ/PTE)

Methyl butenol	20		137-32-6	MBL	
Methyl tert-butyl ether	41	2	1634-04-4	MBE	
Methyl butyl ketone	18	2	591-78-6	MBB	MBK/MIK
Methyl 3-(3,5 di-tert-butyl-4-hydroxyphenyl) propionate crude melt	20		6386-38-5	MYP	
Methylbutynol	20		137-32-6	MBY	MHB
3-Methyl butyraldehyde	19		590-86-3	MBR	
Methyl butyrate	34		623-42-7	MBU	
Methyl chloride	36		74-87-3	MTC	
Methylcyclohexane	31		591-47-9	MCY	
Methylcyclohexanemethanol (crude)	20		34885-03-5	MYH	
Methylcyclopentadiene dimer	30		26472-00-4	MCK	
Methylcyclopentadienyl manganese tricarbonyl	0	1, 3	12108-13-3	MCT	MCW
Methylcyclopentadienyl manganese tricarbonyl (60-70%) in mineral oil	0	1	12108-13-3	MCW	MCT
Methyl diethanolamine	8		105-59-9	MDE	MAB
Methyl ethyl ketone	18	2	78-93-3	MEK	
2-Methyl-6-ethyl aniline	9		24549-06-2	MEN	
Methyl formate	34		107-31-3	MFM	
N-Methylglucamine solution	43	3	6284-40-8	MGC	
2-Methylglutaronitrile	37		4553-62-2	MLN	MGN
2-Methylglutaronitrile with 2-Ethylsuccinonitrile (12% or less)	37	3		MGE	MLN
Methyl heptyl ketone	18		821-55-6	MHK	
2-Methyl-2-hydroxy-3-butyne	20		115-19-5	MHB	MBY
Methyl isoamyl ketone, see Methyl amyl ketone			110-12-0	MAJ	MAK
Methyl isobutyl carbinol, see Methyl amyl alcohol			108-11-2	MIC	MAA
Methyl isobutyl ketone	18		108-10-1	MIK	MBB/MBK
Methyl methacrylate	14		80-62-6	MMM	
Methylene bridged isobutylenated phenols	21		68610-06-0	MBP	

Methylene chloride, see Dichloromethane			75-09-2		DCM
3-Methyl-3-methoxybutanol	20		56539-66-3	MXB	
2-Methyl-5-ethyl pyridine	9		104-90-5	MEP	
3-Methyl-3-methoxybutyl acetate	34		103429-90-9	MMB	
Methyl naphthalene (molten)	32	3	90-12-0	MNA	
Methylolurea	19		1000-82-4	MUS	
2-Methyl pentane, see Hexane (all isomers)			107-83-5		HXS (ALK/HXA/IHA/NHX )
2-Methyl-1,5-pentanediamine	7		15520-10-2	MPM	
2-Methyl-1-pentene, see Hexene (all isomers)			763-29-1	MPN	HEX (HXE/HXT/HXU/HX V/MTN)
4-Methyl-1-pentene, see Hexene (all isomers)			691-37-2	MTN	HEX (HXE/HXT/HXU/HX V/MPN)
Methyl tert-pentyl ether, see tert-Amyl methyl ether			994-05-8		AYE
2-Methyl-1,3-propanediol	20		78-26-2	MDL	
Methyl propyl ketone	18		107-87-9	MKE	
2-Methyl-5-ethylpyridine	9		104-90-5	MEP	
Methylpyridine, see the Methylpyridines				MPQ	MPE/MPF/MPR
2-Methylpyridine	9	3	109-06-8	MPR	MPE/MPF/MPQ
3-Methylpyridine	9	3	109-99-6	MPE	MPF/MPQ/MPR
4-Methylpyridine	9	3	108-89-4	MPF	MPE/MPQ/MPR
N-Methyl-2-pyrrolidone	9	2	872-50-4	MPY	
Methyl salicylate	34		119-36-8	MES	
alpha-Methylstyrene	30		98-83-9	MSR	
3-(Methylthio)propionaldehyde	19		3268-49-3	MTP	
Metolachlor	34		51218-45-2	MCO	
Microsilica slurry	43		69012-64-2	MOS	
Milk	43		8049-98-7	MLK	

Mineral spirits	33		64475-85-0	MNS	
Mixed C4 Cargoes	30			MIX	
Molasses	20		68476-78-8	MOL	MON
Molasses residue (from fermentation)	0	1	94114-07-5	MON	MOL
Molybdenum polysulfide (alternately polysulphide) long-chain alkyl dithiocarbamide complex	0	1, 3	1317-33-5	MOP	
Monochlorodifluoromethane	36		75-45-6	MCF	
Monoethanolamine, see Ethanolamine			141-43-5	MEA	
Monoethylamine, see Ethylamine			75-04-7		EAM (EAN/EAO)
Monoisopropanolamine, see Isopropanolamine			78-96-6		MPA (PLA/PLX)
Morpholine	7	2	110-91-8	MPL	
Motor fuel anti-knock compound (containing lead alkyls)	0	1		MFA	
MTBE, see Methyl tert-butyl ether			1634-04-4		MBE
Myrcene	30		123-35-3	MRE	
Naphtha:					
Aromatic	33		64742-94-5	NAR	
Coal tar solvent	33		8030-30-6	NCT	
Heavy	33		64742-94-5	NAG	
Paraffinic	33		8012-95-1	NPF	
Petroleum	33		64742-94-5	PTN	
Solvent	33		64742-94-5	NSV	
Stoddard solvent	33		8052-41-3	NSS	
Varnish Makers' and Painters'	33		8032-32-4	NVM	
Naphthalene (molten)	32	3	91-20-3	NTM	
Naphthalene crude (molten)	32		91-20-3	NCM	NAC/NCD
Naphthalene still residue	32	2	91-20-3	NSR	
Naphthalene sulfonic (alternately sulphonic) acid, sodium salt solution	34		85-47-2	NSB	NSA
Naphthalene sulfonic (alternately sulphonic) acid- Formaldehyde copolymer, sodium salt solution	0	1	85-47-2	NFS	

Naphthenic acid	4		1338-24-5	NTI	
Naphthenic acid, sodium salt solution	43		61790-13-4	NTS	
Neodecanoic acid	4		26896-20-8	NEA	DCO/NAT
Nitrating acid (mixture of Sulfuric (alternately Sulphuric) and Nitric acids)	0	1	7697-37-2	NIA	
Nitric acid (70% and over)	3	2, 3	7697-37-2	NCE	NAC/NCD
Nitric acid (less than 70%)	3	2	7697-37-2	NCD	NAC/NCE.
Nitric Acid, fuming, see Nitric acid (70% and over)		1, 2, 3	7697-37-2		NCE
Nitric Acid, red fuming, see Nitric acid (70% and over)		1, 2, 3	52583-42-3		NCE
Nitrilotriacetic acid, trisodium salt solution	34	3	139-13-9	NCA	
Nitrobenzene	42		98-95-3	NTB	
o-Nitrochlorobenzene, see o-Chloronitrobenzene			88-73-3		CNO (CNP)
Nitroethane	42		79-24-3	NTE	
Nitroethane (80%)/Nitropropane (20%)	42	2, 3		NNL	NNM/NNO/NPM/NP N/NPP/NTE
Nitroethane/1-Nitropropane (each 15% or more) mixture	42	2		NNO	NNL/NNM/NPM/NP N/NPP/NTE
Nitrogen	0	1	7727-37-9	NXX	
Nitrophenol (mixed isomers)	42		88-75-5	NPX	NIP/NPH
o-Nitrophenol (molten)	0	1, 2	88-75-5	NTP	NIP/NPH/NPX
Nitropropane (60%)/Nitroethane (40%) mixture	42			NNM	NNL/NNO/NPM/NPN /NPP/NTE
1-or 2-Nitropropane	42		108-03-2	NPM	NPN/NPP
o- or p-Nitrotoluenes	42	3	99-99-0	NIT	NIE/NTR/NTT
Nonane (all isomers), see Alkanes (C6-C9)			111-84-2	NAX	ALK (NAN)
Nonanoic acid (all isomers)	4		112-05-0	NNA	NAI/NIN
Nonanoic/Tridecanoic acid mixture	4			NAT	NAI/NIN/NNA
Non-edible industrial grade palm oil, see Oil, misc.: Palm, non-edible industrial grade			8002-75-3		ОРВ

Nonene (all isomers)	30	2	124-11-8	NOO	NNE/NON/OAM/OF X/OFY
Nonyl acetate	34		143-13-5	NAE	
Nonyl alcohol (all isomers)	20	2	143-08-8	NNS	ALR/DBC/NNI/NNN
Nonylbenzene, see Alkyl (C9+) benzenes			1081-77-2		AKB
Non-noxious Liquid Substance, (12) n.o.s. Cat OS	0	1		NOL	
Nonyl methacrylate monomer	14		2696-43-7	NMA	
Nonyl phenol	21		25154-52-3	NNP	
Nonyl phenol poly(4+)ethoxylate, see Alkyl (C7-C11) phenol poly(4-12) ethoxylate			9016-45-9	NPE	APN
Nonyl phenol sulfide (alternately sulphide) (90% or less) solution, see Alkyl (C8-C40) phenol sulfide (alternately sulphide)			34992-00-2		AKS (NPS)
Nonylphenol (48-62%)/Phenol (42-48%)/Dinonylphenol (1-10%) mixture	21			NYL	
Noxious Liquid Substance, NF, (1) n.o.s. ("trade name" contains "principal components") Cat X	0	1			
Noxious Liquid Substance, F, (2) n.o.s. ("trade name" contains "principal components") Cat X	0	1			
Noxious Liquid Substance, NF, (3) n.o.s. ("trade name" contains "principal components") Cat X	0	1			
Noxious Liquid Substance, F, (4) n.o.s. ("trade name" contains "principal components") Cat X	0	1			
Noxious Liquid Substance, NF, (5) n.o.s. ("trade name" contains "principal components") Cat Y	0	1			
Noxious Liquid Substance, F, (6) n.o.s. ("trade name" contains "principal components") Cat Y	0	1			
Noxious Liquid Substance, NF, (7) n.o.s. ("trade name" contains "principal components") Cat Y	0	1			
Noxious Liquid Substance, F, (8) n.o.s. ("trade name" contains "principal components") Cat Y	0	1			
Noxious Liquid Substance, NF, (9) n.o.s. ("trade name" contains "principal components") Cat Z	0	1			

Noxious Liquid Substance, F, (10) n.o.s. ("trade name" contains "principal components") Cat Z	0	1			
Noxious Liquid Substance, (11) n.o.s. ("trade name" contains "principal components") Cat Z	0	1			
Non-noxious Liquid Substance, (12) n.o.s. ("trade name" contains "principal components") Cat OS	0	1		NOL	
Nutmeg butter oil, see Oil, edible: Nutmeg butter					ONB (VEO)
1-Octadecene, see the olefin or alpha-olefin entries			112-88-9		OAM/OFZ
I-Octadecanol, see Stearyl alcohol			112-92-5		SYL (ALY/ASY)
Octadecenoamide solution	10		3322-62-1	ODD	
Octadecenol (oleyl alcohol), see Alcohols (C13+)			143-28-2		ALY (AYL/ASY/OYL)
Octamethylcyclotetrasiloxane	34	3	556-67-2	OSA	
Octane (all isomers), see Alkanes (C6-C9)			111-65-9	OAX	ALK (IOO/OAN)
Octanoic acid (all isomers)	4		124-07-2	OAY	OAA/EHO
Octanol (all isomers)	20	2	111-87-5	OCX	EHX/OPA/OTA
Octene (all isomers)	30	2	111-66-0	OTX	OAM/OFC/OFY/OFW /OTE
n-Octyl acetate	34		112-14-1	OAF	OAE
Octyl alcohol, see Octanol (all isomers)		2	111-87-5		OCX (EHX/IOA/OTA)
Octyl aldehydes	19		124-13-0	OAL	EHA/IOC//OLX
Octylbenzenes, see Alkyl (C5-C8) benzenes			2189-60-8		AKD
Octyl decyl adipate	34		110-29-2	ODA	
n-Octyl mercaptan	0		111-88-6	OME	
Octyl nitrates (all isomers), see Alkyl (C7-C9) nitrates		2	629-39-0	ONE	AKN
Octyl phenol	21		27193-28-8	ОРН	
Octyl phthalate, see Dioctyl phthalate			117-84-0		DAH (DIE/DIO/DLK/DOP)
Offshore contaminated bulk liquid P	0			OBP	
Offshore contaminated bulk liquid S	0			OBS	

Oil, edible:					
Beechnut	34		481-39-0	OBN	VEO
Castor	34		8001-79-4	OCA	VEO
Cocoa butter	34		8002-31-1	OCB	VEO
Coconut	34	2	8001-31-8	OCC	VEO
Cod liver	34		8001-69-2	OCL	AFN
Corn	34		8001-30-7	OCO	VEO
Cottonseed	34		8001-29-4	OCS	VEO
Fish	34	2	8016-13-5	OFS	AFN
Grape seed	34		8024-22-4		
Groundnut	34		8002-03-7	OGN	VEO
Hazelnut	34		185630-72-2	OHN	VEO
Illipe	34		91770-65-9	ILO	VEO
Lard	34		61789-99-9	OLD	AFN
Maize, see Oil, edible: Corn			8001-30-7		OCO (VEO)
Mango kernel	34	3	90063-86-8	MKO	
Nutmeg butter	34		8008-45-5	ONB	VEO
Olive	34		8001-25-0	OOL	VEO
Palm	34	2, 3	8002-75-3	OPM	VEO
Palm kernel	34		8023-79-8	OPO	VEO
Palm kernel olein	34		93334-39-5	PKO	VEO
Palm kernel stearin	34		91079-14-0	PKS	VEO
Palm mid fraction	34		91079-14-0	PFM	VEO
Palm olein	34		93334-39-5	PON	VEO
Palm stearin	34		91079-14-0	PMS	VEO
Peanut	34		8002-03-7	OPN	VEO
Рорру	34		8002-11-7	OPY	VEO
Poppy seed	34		8002-11-7	OPS	VEO
Raisin seed	34		8024-22-4	ORA	VEO
Rapeseed	34		8002-13-9	ORP	VEO

Rapeseed (low erucic acid containing less than 4% free fatty acids)	34	3	8002-13-9	ORO	ORP/VEO
Rice bran	34		68553-81-1	ORB	VEO
Safflower	34		8001-23-8	OSF	VEO
Salad	34		9083-41-4	OSL	VEO
Sesame	34		8008-74-0	OSS	VEO
Shea butter	34		194043-92-0	OSH	VEO
Soyabean	34	2	8001-22-7	OSB	VEO
Sunflower, see Oil, edible: Sunflower seed			8001-21-6		OSN (VEO)
Sunflower seed	34		8001-21-6	OSN	VEO
Tucum	34		356065-49-1	OTC	VEO
Vegetable	34		9083-41-4	OVG	VEO
Walnut	34		8024-09-7	OWN	VEO
Oil, fuel:					
No. 1	33		8008-20-6	OON	
No. 1-D	33			OOD	
No. 2	33		68476-30-2	OTW	
No. 2-D	33			OTD	
No. 4	33		68553-00-4	OFR	
No. 5	33		70892-11-4	OFV	
No. 6	33		68553-00-4	OSX	
Oil, misc.:					
Acid mixture from soyabean, corn (maize) and sunflower oil refining	34			AOM	
Aliphatic	33		8052-41-3	OML	
Animal	34		68991-19-5	OMA	AFN
Aromatic	33		6472-95-6	OMR	
Camelina	34		68956-68-3	OCI	
Cashew nut shell (untreated)	34		8007-24-7	OCN	
Clarified	33		64741-62-4	OCF	

Coal	33		8008-2-06	OMC	
Coconut fatty acid	34	2	61788-47-4	CFA	
Coconut, fatty acid methyl ester	34		61788-59-8	OCM	
Cotton seed oil, fatty acid	34		8001-29-4	CFY	
Crude	33		8002-05-9	OFA	
Diesel	33		68334-30-5	ODS	
Disulfide (alternately Disulphide)	0	1	624-92-0	ODI	
Gas, cracked	33		8006-61-9	GOC	
Gas, high pour	33		8006-61-9	OGP	
Gas, low pour	33		8006-61-9	OGL	
Gas, low sulfur (alternately sulphur)	33		8006-61-9	OGS	
Heartcut distillate	33		68131-77-1	OHD	
Jatropha	34	3	88-6-7	JTO	
Lanolin	34		8006-54-0	OLL	AFN
Linseed	33		8001-26-1	OLS	
Lubricating	33	2	93572-43-1	OLB	
Mineral	33		8042-47-5	OMN	
Mineral seal	33		64742-46-7	OMS	
Motor	33			OMT	
Neatsfoot	33		8002-64-0	ONF	AFN
Oiticica	34		8016-35-1	OOI	
Palm acid	34		8002-75-3	PLM	
Palm fatty acid distillate	34		68440-15-3	PFD	
Palm oil, fatty acid methyl ester	34		91051-34-2	OPE	
Palm kernel acid	34		101403-98	OPK	
Palm kernel fatty acid distillate	34		68440-15-3	PNG	
Palm, non-edible industrial grade	34		8002-75-3	OPB	
Penetrating	33		64742-95-6	OPT	
Perilla	34		68132-21-8	OPR	
Pilchard	34		8016-13-5	OPL	AFN

Pine	33		8002-09-3	OPI	PNL
Rapeseed fatty acid methyl esters	34	3	73891-99-3	ORP	
Residual	33		68476-33-5	ORL	
Resin, distilled	30	3	8016-37-3	ORR	
Road	33		8052-42-4	ORD	
Rosin	33		8002-16-2	ORN	
Seal	34		64742-46-7	OSE	
Soapstock	34		68952-95-4	OIS	
Soyabean (epoxidized)	34		8013-07-8		OSC/EVO
Soyabean fatty acid methyl ester	34		68919-53-9		OST
Spindle	33		64742-54-7	OSD	
Tall	34		8002-26-4	OTL	OTI/OTJ
Tall, crude	34	2	8002-26-4	OTI	OTJ/OTL
Tall, distilled	34	2	8002-26-4	OTJ	OTI/OTL
Tall, fatty acid	34	2	61790-12-3	OTT	
Tall fatty acid (resin acids less than 20%)	34	2	61790-12-3	OTK	OTT
Tall pitch	34		08016-81-7	OTP	
Transformer	33		64742-53-6	OTF	
Tung	34		8001-20-5	OTG	
Turbine	33			OTB	
Used cooking oil	34			OUC	VEO
Used cooking oil (triglycerides, C16-C18, and C18 unsaturated)	34			OUT	VEO
Vacuum gas oil	33		64741-57-7	OVC	
Oleamide solution, see Octadecenoamide solution			301-02-0		ODD
Olefin-Alkyl ester copolymer (molecular weight 2000+)	30			ОСР	
Olefin mixture (C7-C9) C8 rich, stabilized	30	3	25339-56-4	OFC	OFW/OFY/OFX
Olefin mixtures (C5-C7)	30	3	25264-93-1	OFY	OAM/OFC/OFW/OFX /OFZ

Olefin mixtures (C5-C15)	30	3	25264-93-1	OFY	OAM/OFC/OFW/OFX /OFZ
Olefins (C13+, all isomers)	30		85535-87-1	OFZ	OAM/OFW
alpha-Olefins (C6-C18) mixtures	30		592-41-6	OAM	OFC/OFW/OFX/OFY/ OFZ
Oleic acid	4		112-80-1	OLA	
Oleum	0	1, 2	8014-95-7	OLM	SAC/SFX
Oleyl alcohol, see Alcohols (C13+)			143-28-2	OYL	ALY (ASY)
Oleylamine	7		112-90-3	OLY	
Olive oil, see Oil, edible: Olive			8001-25-0		OOL (VEO)
Orange juice (concentrated)	0	1, 3	68514-75-0	OJC	OJN
Orange juice (not concentrated)	0	1, 3	68514-75-0	OJN	OJC
Organomolybdenum amide	10		445409-27-8	OGA	
ORIMULSION, see Asphalt emulsion					ASQ
Oxyalkylated alkyl phenol formaldehyde	33		9003-35-4	OPF	
Oxygenated aliphatic hydrocarbon mixture	0	1, 3		OAH	
Palm acid oil, see Oil, misc.: Palm acid		3	68440-15-3		PLM
Palm fatty acid distillate, see Oil, misc.: Palm fatty acid distillate		3			PFD
Palm kernel acid oil, see Oil, misc.: Palm kernel acid			101403-98		PNO
Palm kernel acid oil, methyl ester, see Oil, misc.: Palm kernel acid, methyl ester					PNF
Palm kernel oil, see Oil, edible: Palm kernel			8023-79-8		OPO (VEO)
Palm kernel oil fatty acid distillate, see Oil, misc.: Palm kernel fatty acid distillate					PNG
Palm kernel olein, see Oil, edible: Palm kernel olein		3	93334-39-5		PKO (VEO)
Palm kernel stearin, see Oil, edible: Palm kernel stearin		3			PKS (VEO)
Palm mid fraction, see Oil, edible: Palm mid fraction		3	91079-14-0		PFM (VEO)
Palm oil, see Oil, edible: Palm		2, 3	8002-75-3	OPM	VEO/OPE

Palm oil fatty acid methyl ester, see Oil, misc.: Palm fatty acid methyl ester		3			ОРЕ
Palm olein, see Oil, edible: Palm olein		3	93334-39-5		PON (VEO)
Palm stearin, see Oil, edible: Palm stearin			91079-14-0		PMS (VEO)
Parachlorobenzotrifluoride	32		98-56-6	PBF	
Paraffin wax, see Waxes: Paraffin		3	8002-74-2		WPF
n-Paraffins (C10-C20), see n-Alkanes (C10+) all isomers				PFN	ALJ
Paraldehyde	19		123-63-7	PDH	
Paraldehyde-Ammonia reaction product	9			PRB	
Peanut, see Oil, edible: Peanut			8002-03-7		OPN (VEO)
Pentachloroethane	36		76-01-7	PCE	
Pentacosa (oxypropane-2,3-diyl)s	20		923-61-5	POY	
Pentadecanol, see Alcohols (C13+)	•		629-76-5	PDC	ALY
1,3-Pentadiene	30		1574-41-0	PDE	PDN
1,3-Pentadiene (greater than 50%), Cyclopentene and isomers, mixtures	30	3	1574-41-0	PMM	
Pentaethylene glycol, see Polyethylene glycols			4792-15-8		PEG
Pentaethylene glycol methyl ether, see Poly (2-8)alkylene glycol monoalkyl (C1-C6) ether			23778-52-1		PAG
Pentaethylenehexamine	7		4067-16-7	PEN	
Pentaethylenehexamine/Tetraethylenepentamine mixture	7			PEP	
Pentane (all isomers)	31		109-66-0	PTY	IPT/PTA
Pentanoic acid	4		109-52-4	POC	
n-Pentanoic acid (64%)/2-Methyl butyric acid (36%) mixture	4			POJ	POC
Pentasodium salt of Diethylenetriaminepentaacetic acid solution, see Diethylenetriaminepentaacetic acid, pentasodium salt solution			140-01-2		DYS
Pentene (all isomers)	30		109-67-1	PTX	PTE
Pentyl aldehyde	19		110-62-3	PYL	

n-Pentyl propionate	34		624-54-4	PPE	
Perchloroethylene	36	2	127-18-4	PER	TTE
Petrolatum	33		8009-03-8	PTL	
Phenol	21	2	108-95-2	PHN	PNS
Phenol solutions (2% or less)	43		108-95-2	PNS	PHN
1-Phenyl-1-xylyl ethane	32		6196-96-8	PXE	
Phosphate esters	34		68130-47-2	PZE	
Phosphate esters, alkyl (C12-C14) amine	7			PEA	
[[(Phosphonomethyl)imino]bis[ethylenenitrilobis(methylene)]]tetrakisphosphonic acid, ammonium salt solution (60% or less)	3			PES	
Phosphoric acid	1	2	7664-38-2	PAC	
Phosphorus, yellow or white	0	1	7723-14-0	PPW	PPB/PPR
Phosphosulfurized (alternately Phosphosulphurized) bicycle terpene	0	1		PBT	
Phthalate based polyester polyol	0	1, 2	32472-85-8	PBE	
Phthalic anhydride (molten)	11		85-44-9	PAN	
<i>PIB</i> , see Poly (4+)isobutylene (molecular weight > 224).			9003-27-4		
alpha-Pinene	30		7785-26-4	PIO	PIB/PIN
beta-Pinene	30		127-91	PIP	PIN/PIO
Pine oil, see Oil, misc.: Pine			8002-09-3	PNL	OPI
Piperazine (70% or less)	7	3	110-85-0	PIZ	PPB/PPZ
Piperazine (crude)	7		110-85-0	PZC	PPZ/PIZ
Piperazine, 68% solution	7		110-85-0		
Polyacrylic acid solution (40% or less)	43		9003-01-4	PYA	
Polyalkenyl succinic anhydride amine	7		108-30-5	PSN	
Polyalkyl acrylate	14		9003-21-8	PAY	
Polyalkyl (C18-C22) acrylate in Xylene	14			PIX	
Polyalkylalkenaminesuccinimide, molybdenum oxysulfide (alternately oxysulphide)	0	3		PSO	

Polyalkylene glycols/Polyalkylene glycol monoalkyl ethers mixtures	40		9038-95-3	PPX	
Polyalkylene glycol butyl ether, see Poly (2-8)alkylene glycol monoalkyl (C1-C6) ether				PGB	PAG
Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether	40	2		PAG	
Including:					
Diethylene glycol butyl ether	40		112-34-5		
Diethylene glycol ethyl ether	40		111-90-0		
Diethylene glycol n-hexyl ether	40		112-59-4		
Diethylene glycol methyl ether	40		111-77-3		
Diethylene glycol propyl ether	40		6881-94-3		
Dipropylene glycol butyl ether	40		112-34-5		
Dipropylene glycol methyl ether	40		34590-94-8		
Polyalkylene glycol butyl ether	40		111-76-2		
Polyethylene glycol monoalkyl ether	40		111-80-5		
Polypropylene glycol methyl ether	40		34590-94-8		
Tetraethylene glycol methyl ether	40		23783-42-8		
Triethylene glycol butyl ether	40		143-22-6		
Triethylene glycol ethyl ether	40		112-50-5		
Triethylene glycol methyl ether	40		112-35-6		
Tripropylene glycol methyl ether	40		25498-49-1		
Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether acetate	34			PAF	
Including:					
Diethylene glycol butyl ether acetate	34		124-17-4		
Diethylene glycol ethyl ether acetate	34		112-15-2		
Diethylene glycol methyl ether acetate	34		110-49-6		
Polyalkylene oxide polyol	20			PAO	
Polyalkylene glycols/Polyalkylene glycol monoalkyl ethers mixtures	40			PPX	
Polyalkylene oxide polyol	20			PAO	

Polyalkyl (C10-C20) methacrylate	14		221-657-1	PMT	PYY
Polyalkyl methacrylate in mineral oil	14			PYY	PMT
Polyalkyl(C10-C18) methacrylate/Ethylene- propylene copolymer mixture	14			PEM	
Polyalpha olefins	31		115-07-1	PYO	
Polyaluminum (alternately Polyaluminium) chloride solution	1		1327-41-9	PLS	
Polybutadiene, hydroxyl terminated	20		69102-90-5	PHT	
Polybutene	33		9003-29-6	PLB	
Polybutenyl succinimide	10		84605-20-9	PBS	
Polycarboxylic ester (C9+), see Ditridecyl adipate			16958-92-2		DTY
Poly (2+)cyclic aromatics	32		91-20-3	PCA	
Polydimethylsiloxane, see Dimethylpolysiloxane			9016-00-6		DMP
Polyether, borated	41			PED	
Polyether (molecular weight 1350+)	41			PYR	
Polyether polyols	41		25214-63-5	PEO	
Polyethylene glycol	40		25322-68-3	PEG	
Polyethylene glycol dimethyl ether	40		24991-55-7	PEF	
Poly(ethylene glycol) methylbutenyl ether (molecular weight >1000)	40			PBN	
Polyethylene glycol monoalkyl ether, see Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether			111-77-3	PEE	PAG
Polyethylene polyamines	7	2	109-89-7	PEB	PEY
Polyethylene polyamines (more than 50% C5-C20 Paraffin oil)	7	2, 3		PEY	PEB
Polyferric sulfate (alternately sulphate) solution	34		51434-22-1	PSS	
Polyglycerine/Sodium salts solution (containing less than 3% Sodium hydroxide)	20	2		PGT	PGS
Polyglycerol	20		25618-55-7	PGL	
Poly(iminoethylene)-graft-N-poly(ethyleneoxy) solution (90% or less)	7	3		PIG	PIM

Polyisobutenamine in aliphatic (C10-C14) solvent	7	2		PIB	PIA
(Polyisobutene) amino products in aliphatic hydrocarbons	7	3			
Polyisobutenyl anhydride adduct	11			PBA	
Polyisobutenyl succinimide	10		84605-20-9	PIS	
Poly(4+)isobutylene (molecular weight > 224)	30	3	9003-27-4	PIL	
Polyisobutylene (molecular weight ≤ 224)	30	3	9003-27-4	PIL	
Polyisobutylene succinic anhydride	11		67762-77-0	PYS	
Polymerized esters	34			PYM	
Polymethylene polyphenyl isocyanate	12	2	9016-87-9	PPI	
Polymethylsiloxane	34		9006-65-9	PMX	
Polyolefin (molecular weight 300+)	33			PMW	PLF
Polyolefin amide alkeneamine (C17+)	33			РОН	POD
Polyolefin amide alkeneamine (C28+), see Polyolefin amide alkenamine (C17+)				POD	РОН
Polyolefin amide alkeneamine borate (C28-C250)	33		134758-95-5	PAB	
Polyolefin amide alkeneamine in mineral oil	33			PLK	
Polyolefin amide alkeneamine/Molybdenum oxysulfide (alternately oxysulphide) mixture	7			PMO	
Polyolefin amide alkeneamine polyol	20			PAP	
Polyolefinamine (C17+)	7		98761-78-5	POG	
Polyolefinamine (C28-C250)	33			POM	
Polyolefinamine in alkyl(C2-C4) benzenes	32			POF	POR
Polyolefinamine in aromatic solvent	32	3		POR	POF
Polyolefin aminoester salts (molecular weight 2000+)	34			PAE	
Polyolefin anhydride	11		9006-26-2	PAR	
Polyolefin ester (C28-C250)	34			POS	
Polyolefin in mineral oil	30			PLF	PMW
Polyolefin phenolic amine (C28-C250)	9			PPH	

Polyolefin phosphorosulfide (alternately phosphorosulphide), barium derivative (C28-C250)	34			PPS	
Poly (oxyalkylene) alkenyl ether (molecular weight > 1000)	41	3	9005-00-9	PXY	
Polyoxybutylene alcohol	41		9002-92-0	PXA	
Poly(20)oxyethylene sorbitan monooleate	34		9005-65-6	PSM	
Polyoxypropylenediamine (molecular weight 2000)	7			PYD	
Poly(5+) propylene	30		9003-07-0	PLQ	PLP
Polypropylene glycol	40	2	25322-69-4	PGC	
Polypropylene glycol methyl ether, see Poly (2-8)alkylene glycol monoalkyl (C1-C6) ether			107-98-2	PGM	PAG
Polysiloxane	34		63148-53-8	PSX	
Polysiloxane/White spirit, low (15-20%) aromatic	34			PWS	
Poly(tetramethylene ether) glycols (molecular weight 950-1050), see alpha-hydro-omega- Hydroxytetradeca(oxytetramethylene)			25190-06-1	PYU	НТО
Polytetramethylene ether glycol	40		25190-06-1	PYT	HTO/PYU/PYS
Poppy seed, see Oil, edible: Poppy seed			8002-11-7		OPS (VEO)
Poppy, see Oil, edible: Poppy					OPY (VEO)
Potassium chloride solution	43		7447-40-7	PCU	PCD/PSD
Potassium chloride solution (10% or more)	43		7447-40-7	PCS	PCD/PCU
Potassium chloride solution (less than 26%)	43		7447-40-7	PSD	CLM/DRL/PCS/PCU
Potassium formate solutions	34		590-29-4	PFR	
Potassium hydroxide solution, see Caustic potash solution		2	1310-58-3		CPS/PTH
Potassium oleate	34		143-18-0	POE	
Potassium polysulfide (alternately polysulphide)/Potassium thiosulfide (alternately thiosulphide) solution (41% or less)	0	1		PYP	PSF/PTF
Potassium salt of polyolefin acid	34			PSP	
Potassium thiosulfate (alternately thiosulphate) (50% or less)	43		10294-66-3	PTF	

Propane	31		74-98-6	PRP	LPG
iso-Propanolamine, see Isopropanolamine			78-96-6		MPA (PAX/PLA)
n-Propanolamine	8		107-10-8	PLA	MPA/PAX
2-Propene-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer solution	0	1, 3		PLN	
Propionaldehyde	19		123-38-6	PAD	
beta-Propiolactone	18	3	57-57-8	PLT	
Propionic acid	4		79-09-4	PNA	
Propionic anhydride	11		123-62-6	PAH	
Propionitrile	37		107-12-0	PCN	
<i>n-Propoxypropanol, see</i> Propylene glycol monoalkyl ether			1569-01-3	PXP	PGE
n-Propyl acetate	34		109-60-4	PAT	IAC
n-Propyl alcohol	20	2	71-23-8	PAL	IPA
n-Propyl chloride	36		540-54-5	PRC	
Propyl ether	41		557-17-5		IPE/PRE
n-Propylamine	7		107-10-8	PRA	IPO/IPP/IPQ
iso-Propylamine solution, see Isopropylamine (70% or less) solution			75-31-0		IPQ (IPO/IPP/PRA)
Propylbenzenes (all isomers), see Alkyl (C3-C4) benzenes			103-65-1	PBY	AKC (CUM/PBZ)
iso-Propyl cyclohexane, see Isopropylcyclohexane			696-29-7		IPX
Propylene	30		115-07-1	PPL	
Propylene-Butylene copolymer	30		29160-13-2	PBP	
Propylene carbonate	34		108-32-7	PLC	
Propylene dimer	30		26824-72-2	PDR	
Propylene glycol	20	2	57-55-6	PPG	
Propylene glycol n-butyl ether, see Propylene glycol monoalkyl ether			5131-66-8	PGD	PGE
Propylene glycol ethyl ether, see Propylene glycol monoalkyl ether			1569-02-4	PGY	PGE

Propylene glycol methyl ether, see Propylene glycol monoalkyl ether		2	107-98-2	PME	PGE
Propylene glycol methyl ether acetate	34	2	108-65-6	PGN	
Propylene glycol monoalkyl ether	40			PGE	
Including:					
n-Propoxypropanol	40		30136-13-1		
Propylene glycol n-butyl ether	40		5131-66-8		
Propylene glycol ethyl ether	40		1569-02-4		
Propylene glycol methyl ether	40		107-98-2		
Propylene glycol propyl ether	40		1569-01-3		
Propylene glycol phenyl ether	40		770-35-4	PGP	
Propylene glycol propyl ether, see Propylene glycol monoalkyl ether			1569-01-3		PGE
Propylene oxide	16		75-56-9	POX	
Propylene tetramer	30		6842-15-5	PTT	
Propylene trimer	30		13987-01-4	PTR	
Propylene/Propane/MAPP gas mixture	30	2		PPM	
Pseudocumene, see Trimethylbenzene (all isomers)			95-63-6		TMB/TMD/TME/TRE
Pyridine	9		110-86-1	PRD	
Pyridine bases, see Paraldehyde-Ammonia reaction product					PRB
Pyrolysis gasoline (containing Benzene)	32	3	68477-58-7	PYG	GPY
Rapeseed oil (low erucic acid containing less than 4% free fatty acids), see Oil, edible: Rapeseed (low erucic acid containing less than 4% free fatty acids)		3	8002-13-9		ORO (VEO)
Rapeseed oil fatty acid methyl esters, see Oil, misc.: Rapeseed fatty acid methyl esters		3	73891-99-3		RSO
Rapeseed oil, see Oil, edible: Rapeseed			8002-13-9		ORO (VEO)
Refrigerant gases	0	1		RFG	
Resin oil, distilled, see Oil, misc.: Resin, distilled		3			ORR (ORS)
Rice bran oil, see Oil, edible: Rice bran			68553-81-1		ORB

Rosin soap (disproportionated) solution	43		61790-50-9	RSP	
Rosin, see Oil, misc.: Rosin			8050-09-7		ORN
Rum, see Alcoholic beverages, n.o.s.			64-17-5		ABV
Safflower oil, see Oil, edible: Safflower			8001-23-8		OSF (VEO)
Sewage sludge	43			SWS	
Shea butter, see Oil, edible: Shea butter		3	194043-92-0		OSH (VEO)
Silica slurry	43		69012-64-2	SLC	
Siloxanes	34		9011-19-2	SLX	
Sludge, treated	43			SWA	
Sodium acetate solutions	34		127-09-3	SAN	
Sodium acetate, Glycol, Water mixture (containing 1% or less Sodium hydroxide) (if non-flammable or non-combustible)	5	2		SAY	SAO/SAP/SAQ/SAY
Sodium acetate, Glycol, Water mixture (containing Sodium hydroxide)	5			SAQ	SAO/SAP/SAW/SAY
Sodium acetate, Glycol, Water mixture (not containing Sodium hydroxide)	34	2		SAW	SAO/SAP/SAQ/SAY
Sodium alkyl (C14-C17) sulfonates (alternately sulphonates) (60-65% solution)	34			SSU	AKA/AKE
Sodium aluminate solution	5		11138-49-1	SAV	SAU
Sodium aluminate solution (45% or less)	5		11138-49-1	SAU	SAV
Sodium aluminosilicate slurry	34		1344-00-9	SLR	
Sodium benzoate	34		532-32-1	SBN	SBM
Sodium bicarbonate solution (less than 10%)	34	3	144-55-8	SBC	
Sodium borohydride (15% or less)/Sodium hydroxide solution	5			SBX	CSS/SBH/SBI/SHD
Sodium bromide solution (less than 50%)	43	3	7647-15-6	SBL	SBR
Sodium carbonate solution	5		497-19-8	SCE	
Sodium chlorate solution (50% or less)	0	1, 2	7775-09	SDD	SDC
Sodium cyanide solution	5		143-33-9	SCO	SCN/SCS
Sodium dichromate solution (70% or less)	0	1, 2	7789-12-0	SDL	SCR

Sodium dimethyl naphthalene sulfonate solution, see Dimethyl naphthalene sulfonic (alternately sulphonic) acid, sodium salt solution			532-02-5		DNS
Sodium hydrogen sulfide (alternately sulphide) (6% or less)/Sodium carbonate (3% or less) solution	0	1, 2, 3		SSS	SCE/SHW
Sodium hydrogen sulfite (alternately sulphite) solution (45% or less)	43		7631-90-5	SHY	SHX
Sodium hydrosulfide (alternately hydrosulphide)/Ammonium sulfide (alternately sulphide) solution	5	2		SSA	ASF/ASS
Sodium hydrosulfide (alternately hydrosulphide) solution (45% or less)	5	2	16721-80-5	SHR	
Sodium hydroxide solution, see Caustic soda solution		2	1310-73-2		CSS (SHD)
Sodium hypochlorite solution (15% or less)	5		7681-52-9	SHP	SHC/SHQ
Sodium hypochlorite solution (20% or less)	5		7681-52-9	SHQ	SHC/SHP
Sodium lignosulfonate (alternately lignosulphonate) solution	43		8061-51-6	SLG	LNL
Sodium long-chain alkyl salicylate (C13+)	34		84539-60-6	SLS	
Sodium-2-mercaptobenzothiazol solution, see Mercaptobenzothiazol, sodium salt solution			2492-26-4		SMB
Sodium methoxide (25% in methanol)	0	1	124-41-4	SMO	
Sodium methylate 21-30% in methanol	0	1, 2, 3	124-41-4	SMT	SMS
Sodium naphthalene sulfonate (alternately sulphonate) solution, see Naphthalene sulfonic (alternately sulphonic) acid (40% or less), sodium salt solution (40% or less)			532-02-5	SNS	NSA (NSB)
Sodium naphthenate solution, see Naphthenic acid, sodium salt solution			61790-13-4		NTS
Sodium nitrite solution	5		7632-00-0	SNI	SNT
Sodium N-methyl dithio carbamate solution, see Metam sodium solution			137-42-8	MSS	SMD
Sodium petroleum sulfonate (alternately sulphonate)	34		68608-26-4	SPS	
Sodium poly (4+)acrylate solution	43	2	9003-04-7	SOP	SOO

Sodium polyacrylate solution	43	2	9003-04-7	SOO	SOP
Sodium salt of Ferric hydroxyethylethylenediaminetriacetic acid solution, see Ferric hydroxyethylethylenediaminetriacetic acid, trisodium salt solution			139-89-9	STA	FHX
Sodium silicate solution	43	2	1344-09-8	SSN	SSC
Sodium sulfate (alternately sulphate) solution	34	3	7757-82-5	SST	SSO
Sodium sulfide (alternately sulphide) solution (15% or less)	43		1313-82-2	SDR	SDS
Sodium sulfide (alternately sulphide)/Hydrosulfide (alternately Hydrosulphide) solution (H <sub>2</sub> S 15 ppm or less)	0	1, 2		SSH	SDS/SHR/SSI/SSJ
Sodium sulfide (alternately sulphide)/Hydrosulfide (alternately Hydrosulphide) solution (H <sub>2</sub> S greater than 15 ppm but less than 200 ppm)	0	1, 2		SSI	SDS/SHR/SSH/SSJ
Sodium sulfide (alternately sulphide)/Hydrosulfide (alternately Hydrosulphide) solution (H <sub>2</sub> S greater than 200 ppm)	0	1, 2		SSJ	SDS/SHR/SSH/SSI
Sodium sulfite (alternately sulphite) solution (25% or less)	43		7757-83-7	SUP	SSF/SUS
Sodium tartrates/Sodium succinates solution	43			STM	
Sodium thiocyanate solution (56% or less)	0	1, 2	540-72-7	STS	SCY
Sorbitol solution	20		50-70-4	SBU	SBT
Soyabean fatty acid methyl ester, see Oil, misc.: Soyabean fatty acid methyl ester			67784-80-9		OST
Soyabean oil (epoxidized)	34		8013-07-8		OSC/EVO
Soyabean oil, see Oil, edible: Soyabean		2	8001-22-7		OSB (VEO)
Stearic acid, see Fatty acids (saturated, C13+)			57-11-4	SRA	FAD (FAB/FAE/FDI/FDT)
Stearyl alcohol	20		112-92-5	SYL	ALY/ASY
Stoddard solvent, see Naphtha: Stoddard solvent			8032-32-4		NSS
Styrene monomer	30		100-42-5	STY	

Sulfohydrocarbon (alternately Sulphohydrocarbon) (C3-C88)	33			SFO	
Sulfohydrocarbon (alternately Sulphohydrocarbon), long-chain (C18+) alkylamine mixture	7			SFX	
Sulfolane (alternately Sulpholane)	39		126-33-0	SFL	
Sulfonated (alternately Sulphonated) polyacrylate solutions	43	2		SPA	
Sulfur (alternately Sulphur) (molten)	0	1, 2	7704-34-9	SXX	
Sulfur (alternately Sulphur) dioxide	0	1	7446-09-5	SFD	
Sulfuric (alternately Sulphuric) acid	2	2	7664-93-9	SFA	SAC
Sulfuric (alternately Sulphuric) acid, spent	2	2	7664-93-9	SAC	SFA
Sulfurized (alternately Sulphurized) fat (C14-C20)	33			SFT	
Sulfurized (alternately Sulphurized) polyolefinamide	10			SPY	
Sulfurized (alternately Sulphurized) polyolefinamide alkene (C28-C250) amine	33			SPO	
Sunflower seed oil, see Oil, edible: Sunflowerseed	34		8001-21-6		OSN (VEO)
Sym-trichlorobenzene, see 1,2,4-Trichlorobenzene.			108-70-3		
Tall oil, see Oil, misc.: Tall			8002-26-4		OTL (OTI/OTJ)
Tall oil, crude, see Oil, misc.: Tall, crude		2, 3	8002-26-4		OTI (OTJ/OTL)
Tall oil, distilled, see Oil, misc.: Tall, distilled		3	8002-26-4		OTJ (OTI/OTL)
Tall oil, fatty acid, see Oil, misc.: Tall fatty acid		2	61790-12-3		OTT
Tall oil fatty acid (resin acids less than 20%), see Oil, misc.: Tall oil fatty acid (resin less than 20%)		2			OTK (OTT)
Tall oil fatty acid, barium salt	0	1, 2		TOB	
Tall oil pitch, see Oil, misc.: Tall pitch		3	08016-81-7		OTP (OTI/OTJ/OTL)
Tall oil soap (crude)	34			TOR	TOS
Tall oil soap (disproportionated) solution	43			TOS	
Tallow	34	2	61789-97-7	TLO	
Tallow alcohol, see Alcohols (C13+)		2	67762-27-0	TFA	ALY (ASY)
Tallow alkyl nitrile	37			TAN	
Tallow fatty acid	34	2	61790-37-2	TFD	

Tallow fatty alcohol, see Alcohols (C13+)		2	67762-27-0	TFA	ALY
TAME, see tert-Amyl methyl ether			994-05-8		AYE
Tertiary butylphenols	21		128-39-2	BLT	BTP
Tetrachloroethane	36		79-34-5	TEC	
1,1,2,2-Tetrachloroethane, see Tetrachloroethane	36		79-34-5	TEC	TEE
Tetradecanol, see Alcohols (C13+)			112-72-1	TTN	ALY
Tetradecene, see olefins or alpha-olefin entries			1120-36-1		OAM/OFY/OFW/OFZ /TDD
Tetradecylbenzene, see Alkyl (C9+) benzenes			1459-10-5	TDB	AKB
Tetraethyl silicate monomer/oligomer (20% in ethanol)	0	1, 3		TSM	
Tetraethylene glycol	40		112-60-7	TTG	
Tetraethylene glycol methyl ether, see Poly (2-8)alkylene glycol monoalkyl (C1-C6) ether			23783-42-8		PAG
Tetraethylenepentamine	7	2	112-57-2	TTP	
Tetrahydrofuran	41		109-99-9	THF	
Tetrahydronaphthalene	32		119-64-2	THN	
Tetramethylbenzene (all isomers)	32		527-53-7	TTC	TTB
<i>1,2,3,5-Tetramethylbenzene, see</i> Tetramethylbenzene (all isomers)			527-53-7	ТТВ	TTC
Tetrapropylbenzene, see Alkyl (C9+) benzenes					AKB
Tetrasodium salt of ethylenediaminetetraacetic acid solution, see Ethylenediaminetetraacetic acid, tetrasodium salt solution			13235-36-4		EDS
Titanium dioxide slurry	43		13463-67-7	TDS	
Titanium tetrachloride	2		7550-45-0	TTT	
Toluene	32	2	108-88-3	TOL	
Toluene diisocyanate	12	2	584-84-9		TDI
Toluenediamine	9		95-80-7	TDA	
o-Toluidine	9	2	95-53-4	TLI	TOD/TOI

Triarylphosphate, see Triisopropylated phenyl phosphates			115-86-6	TRA	TPL
Tributyl phosphate	34		126-73-8	TBP	
1,2,3-Trichlorobenzene (molten)	36	3	120-82-1	TBZ	TCB
1,2,4-Trichlorobenzene	36		120-82-1	TCB	TBZ
<i>1,2,3-Trichlorobenzol, see</i> 1,2,3-Trichlorobenzene (molten)			87-61-6	TBZ	ТСВ
1,1,1-Trichloroethane	36	2	71-55-6	TCE	TCM
1,1,2-Trichloroethane	36		79-00-5	TCM	TCE
Trichloroethylene	36	2	79-01-6	TCL	
1,1,2-Trichloro-1,2,2-trifluoroethane	36		76-13-1	TTF	
Tricresyl phosphate (containing 1% or more ortho- isomer)	34	3	78-30-8 (o isomer)	TCO	TCP/TCQ
Tricresyl phosphate (containing less than 1% ortho- isomer)	34	3	1330-78-5	ТСР	TCO/TCQ
1,2,3-Trichloropropane	36	2	96-18-4	TCN	
Tridecane (all isomers), see n-Alkanes (C10+) (all isomers)			629-50-5	TRD	ALV (ALJ)
Tridecanoic acid	34		638-53-9	TDO	
Tridecanol, see Alcohols (C13+)			112-70-9	TDN	ALY (ASK/ASY/AYK/LAL )
Tridecene, see Olefins (C13+ all isomers)			2437-56-1	TRD	OAM/OFY/OFW/OFZ /TDC
Tridecyl acetate	34		1072-33-9	TAE	
Tridecylbenzene, see Alkyl (C9+) benzenes			123-02-4	TRB	AKB
Triethanolamine	8	2	102-71-6	TEA	
Triethylamine	7		121-44-8	TEN	
Triethylbenzene	32		102-25-0 (1,3,5)	TEB	
Triethylene glycol	40		112-27-6	TEG	
Triethylene glycol butyl ether, see Poly (2-8)alkylene glycol monoalkyl (C1-C6) ether			143-22-6	ТВЕ	PAG

Triethylene glycol butyl ether mixture	40		143-22-6	TBD	
Triethylene glycol di-(2-ethylbutyrate)	34		95-08-9	TGD	
Triethylene glycol dibenzoate	34		120-56-9	TGB	
Triethylene glycol ether mixture	40		112-35-6	TYM	
Triethylene glycol ethyl ether, see Poly (2-8)alkylene glycol monoalkyl (C1-C6) ether			112-50-5	TGE	PAG
Triethylene glycol methyl ether, see Poly (2-8)alkylene glycol monoalkyl (C1-C6) ether			112-35-6	TGY	PAG
Triethylenetetramine	7	2	112-24-3	TET	
Triethyl phosphate	34		78-40-0	TPS	
Triethyl phosphite	34	2	122-52-1	TPI	
Triisobutylene	30		7756-94-7	TIB	
Triisooctyl trimellitate	34		27251-75-8	TIS	
Triisopropanolamine	8		122-20-3	TIP	
Triisopropanolamine salt of 2,4- Dichlorophenoxyacetic acid solution, see 2,4- Dichlorophenoxyacetic acid, Triisopropanolamine salt solution					DTI
Triisopropylated phenyl phosphates	34		26967-76-0	TPL	
Trimethylacetic acid	4		75-98-9	TAA	
Trimethylamine solution (30% or less)	7		75-50-3	TMT	TMA
Trimethylbenzene (all isomers)	32		95-63-6 (1,2,4)	TRE	TMB/TMD/TME
Trimethyl nonanol, see Dodecyl alcohol			112-53-8		DDN (ASK/ASY/LAL)
Trimethylol propane polyethoxylated	20		50586-59-9	TPR	
Trimethyl phosphite	34	2	121-45-9	TPP	
Trimethylhexamethylene diisocyanate (2,2,4- and 2,4,4-)	12		28679-16-5	THI	
Trimethylhexamethylenediamine (2,2,4- and 2,4,4-)	7		25513-64-8	THA	
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	34		6846-50-0	TMQ	
2,2,4-Trimethyl-1,3-pentanediol-1-isobutyrate	34		18491-15-1	TMP	

2,2,4-Trimethyl-3-pentanol-1-isobutyrate	34			TMR	
1,3,5-Trioxane	41	2	110-88-3	TRO	
Triphenylborane (10% or less)/Caustic soda solution	5		960-71-4	TPB	
Tripropylene, see Propylene trimer			13987-01-4		PTR
Tripropylene glycol	40		24800-44-0	TGC	
Tripropylene glycol methyl ether, see Poly (2-8)alkylene glycol monoalkyl(C1-C6) ether			25498-49-1	TGM	PAG
Trisodium nitrilotriacetate solution, see Nitrilotriacetic acid, trisodium salt solution			5064-31-3	TSO	NCA (TSN)
Trisodium phosphate solution	5		10101-89-0	TSP	
Trisodium salt of N- (Hydroxyethyl)ethylenediaminetriacetic acid solution, see N- (Hydroxyethyl)ethylenediaminetriacetic acid, trisodium salt solution			207386-87-6		НЕТ
Trixylyl phosphate	34		25155-23-1		TRP
Trixylenyl phosphate, see Trixylyl phosphate			25155-23-1		TRP
Tung oil, see Oil, misc.: Tung			8001-20-5		OTG
Turpentine	30		9005-90-7	TPT	
Turpentine substitute, see White spirit (low (15-20%) aromatic)			8052-41-13		WSL (WSP)
Undecane (all isomers), see Alkanes (C10+) (all isomers)			1120-21-4	UDN	ALV (ALJ)
Undecanoic acid	4		112-37-8	UDA	
Undecanol, see Undecyl alcohol			112-42-5		UND (ALR)
Undecene	30		1120-21-4	UDD	UDC
1-Undecene	30		821-95-4	UDC	UDD
Undecyl alcohol	20		112-42-5	UND	ALR
Undecylbenzene, see Alkyl (C9+) benzenes			67774-74-7	UDB	AKB
Urea solution	43		57-13-6	USL	URE
Urea, Ammonium mono- and di-hydrogen phosphate/Potassium chloride solution	0	1		UPX	

Urea/Ammonium nitrate solution (containing less than 1% free Ammonia)	43	2		UAU	ANU/UAS/UAT/UAV
Urea/Ammonium nitrate solution (containing 1% or more free Ammonia)	6			UAT	ANU/UAS
Urea/Ammonium phosphate solution	43			UAP	
Vacuum gas oil, see oil misc.: Vacuum gas oil	33		64741-57-7	OVC	
Valeraldehyde (all isomers)	19		110-62-3	VAK	IVA/VAL
Vanillin black liquor (free alkali content 3% or more)	5		68514-06-7	VBL	
Vegetable acid oils, n.o.s.	34			VAD	
Including:					
Corn acid oil	34		68308-50-9		
Cottonseed acid oil	34		68308-51-0		
Dark mixed acid oil	34				
Groundnut acid oil	34				
Mixed acid oil	34				
Mixed general acid oil	34				
Mixed hard acid oil	34				
Mixed soft acid oil	34				
Rapeseed acid oil	34		112-86-7		
Safflower acid oil	34				
Soya acid oil	34		68308-53-2		
Sunflower seed acid oil	34		84625-38-7		
Vegetable oil mixtures, containing less than 15% free fatty acid (m)	34			VEO	
Vegetable fatty acid distillates, n.o.s.	34	3		VFD	
Including:					
Palm kernel fatty acid distillate	34		67701-05-7		
Palm oil fatty acid distillate	34		68440-15-3		
Tall fatty acid distillate	34		61790-12-3		
Tall oil fatty acid distillate	34		61790-12-3		

Vegetable oils, n.o.s.	34			VEO	
Including:					
Beechnut oil	34				
Camelina oil	34		68956-68-3		
Cashew nut shell	34		8007-24-7		
Castor oil	34		8001-79-4		
Cocoa butter	34		8002-31-1		
Coconut oil	34	2	8001-31-8		
Corn oil	34		8001-30-7		
Cottonseed oil	34		801-29-4		
Croton oil	34		8001-28-3		
Grape seed oil	34		8024-22-4		
Groundnut acid oil	34				
Hazelnut oil	34		84012-21-5		
Illipe oil	34		91770-65-9		
Jatropha oil	34		88-6-7	JTO	
Linseed oil	34		8001-26-1		
Mango kernel oil	34		90063-86-8		
Nutmeg butter	34		8008-45-5		
Oiticica oil	34		8016-35-1		
Olive oil	34		8001-25-0		
Palm kernel oil	34		8023-79-8		
Palm kernel olein	34		93334-39-5		
Palm kernel stearin	34				
Palm mid fraction	34		91079-14-0		
Palm, non-edible industrial grade	34		8002-75-3		
Palm oil	34	2, 3	8002-75-3		
Palm olein	34		93334-39-5		
Palm stearin	34		91079-14-0		
Peanut oil	34		8002-03-7		

Peel oil (oranges and lemons)	34		8008-56-8		
Perilla oil	34		68132-21-8		
Pine oil	34		8002-09-3		
Poppy seed oil	34		8002-11-7		
Poppy oil	34				
Raisin seed oil	34		8024-22-4		
Rapeseed oil	34		8002-13-9		
Rapeseed (low erucic acid containing less than 4% free fatty acids)	34	3			
Resin oil, distilled	30	3			
Rice bran oil	34		68553-81-1		
Rosin oil	34		8002-16-2		
Safflower oil	34		8001-23-8		
Salad oil	34		68956-68-3		
Sesame oil	34		8008-74-0		
Shea butter	34		194043-92-0		
Soyabean oil	34	2	8001-22-7		
Sunflower seed oil	34		8001-21-6		
Tall	34		8002-26-4		
Tall, crude	34		8002-26-4		
Tall, distilled	34		8002-26-4		
Tall, pitch	34		8016-81-7		
Tucum oil	34		98143-57-8		
Tung oil	34		8001-20-5		
Walnut oil	34		8024-09-7		
Vegetable protein solution (hydrolyzed)	43		100209-45-8	VPS	
Vinyl acetate	13	2	108-05-4	VAM	
Vinyl chloride	35		75-01-4	VCM	
Vinyl ethyl ether	13		109-92-2	VEE	
Vinylidene chloride	35		75-35-4	VCI	

Vinyl neodecanoate	13	2	51000-52-3	VND	
Vinyltoluene	13		25013-15-4	VNT	
Water	43		7732-18-5	WTR	
Waxes				WAX	
Including:					
Candelilla	34		8006-44-8	WCD	
Carnauba	34		8015-86-9	WCA	
Hydrocarbon	31			WHC	WPF
Paraffin	31		8002-74-2	WPF	
Petroleum	33			WPT	
White spirit, see White spirit (low (15-20%) aromatic)			8052-41-13	WSP	WSL
White spirit (low (15-20%) aromatic)	33		8052-41-3	WSL	WSP
Wine, see Alcoholic beverages			64-17-5	ABV	
Wood lignin with Sodium acetate/oxalate	0	1, 3		WOL	
Xylenes	32	2	106-42-3	XLX	XLM/XLO/XLP
Xylenes/Ethylbenzene (10% or more) mixture	32			XEB	
Xylenols	21		105-67-9	XYL	
Zinc alkaryl dithiophosphate (C7-C16)	34			ZAD	
Zinc alkenyl carboxamide	10			ZAA	WSL
Zinc alkyl dithiophosphate (C3-C14)	34		688649-42-3	ZAP	
Zinc bromide/Calcium bromide solution, see Drilling brine (containing Zinc salts)			7699-45-8		DZB

## **Notes:**

Italicized words are not part of the cargo name but may be used in addition to the cargo name.

CAS numbers marked with an asterisk (\*) represent the CAS number of the lowest member in the homologous series.

Not all chemicals have been assigned CAS numbers. These cells are left blank in the CAS Number column.

## **Footnotes:**

- 1. Because of very high reactivity, unusual conditions of carriage, or potential compatibility problems, this commodity is not assigned to a specific group in Figure 1 to 46 CFR part 150 (Compatibility Chart).
- 2. See Appendix I to 46 CFR part 150 (Exceptions to the Chart).
- 3. Entry was added from the March 2012 Annex to the 2007 edition of the IBC Code (MEPC 63/23/Add.1), the December 2012 IMO Marine Environmental Protection Committee Circular (MEPC.2/Circ.18), or the December 2013 IMO Marine Environmental Protection Committee Circular (MEPC.2/Circ.19).

**Table 2 to Part 150 – Grouping of Cargoes** 

Group	Cargo
0. Unassigned Cargoes	Acetone cyanohydrin
	Alkenoic acid, polyhydroxy ester borated
	Alkylbenzene distillation bottoms
	Alkyl (C8-C10)/(C12-C14):(60% or more/40% or less)
	Alkyl (C11-C17) benzene sulfonic (alternately sulphonic) acid
	Alkylbenzene sulfonic (alternately sulphonic) acid (less than 4%) <sup>1</sup>
	Alkyl (C18-C28) toluenesulfonic (alternately toluenesulphonic) acid
	Aluminum (alternately Aluminium) chloride/Hydrogen chloride solution
	Ammonium hydrogen phosphate solution
	Ammonium nitrate solution (45% or less)
	Ammonium nitrate solution (93% or less)
	Ammonium thiocyanate/Ammonium thiosulfate (alternately thiosulphate) solution
	Argon, liquefied
	Benzenesulfonyl (alternately Benzenesulphonyl) chloride <sup>1</sup>
	gamma-Butyrolactone <sup>1</sup>
	Carbon dioxide (high purity)
	Carbon dioxide (reclaimed quality)
	Carbon dioxide, liquefied
	Chlorine
	2-Chloro-4-ethylamino-6-isopropylamino-5-triazine solution
	Chlorosulfonic (alternately Chlorosulphonic) acid
	Decyloxytetrahydro-thiophene dioxide
	2,4-Dichlorophenoxyacetic acid, Dimethylamine salt solution (70% or less) <sup>1</sup>
	Dimethyl disulfide (alternately disulphide)
	Diphenylol propane-Epichlorohydrin resins
	Disulfide (alternately Disulphide)
	Dodecyl hydroxypropyl sulfide (alternately sulphide) <sup>1</sup>
	Dodecyl benzenesulfonic (alternately Dodecyl benzenesulphonic) acid <sup>1</sup>
	Ethylene oxide
	Hydrogen peroxide solutions (over 60% but not more than 70% by mass)
	Hydrogen peroxide solutions (over 8% but not more than 60% by mass)

Hydrogenated starch hydrolysate
Lactic acid <sup>1</sup>
Liquid chemical wastes
Long-chain alkaryl sulfonic (alternately sulphonic) acid (C16-C60) <sup>1</sup>
Magnesium chloride solution <sup>1</sup>
Maltitol solution
Methylcyclopentadienyl manganese tricarbonyl
Methylcyclopentadienyl manganese tricarbonyl (60-70%) in mineral oil
Molasses residue (from fermentation)
Molybdenum polysulfide (alternately polysulphide) long-chain alkyl dithiocarbamide complex
Motor fuel anti-knock compound (containing lead alkyls)
Naphthalene sulfonic (alternately sulphonic) acid-formaldehyde copolymer, sodium salt solution
Nitrating acid (mixture of Sulfuric (alternately Sulphuric) and Nitric acids)
Nitric acid (70% and over) <sup>1</sup>
Nitric acid fuming
Nitric acid red fuming
Nitrogen
o-Nitrophenol (molten) <sup>1</sup>
Noxious Liquid Substance, NF, (1) n.o.s. ("trade name" contains "principal components") Cat X
Noxious Liquid Substance, F, (2) n.o.s. ("trade name" contains "principal components") Cat X
Noxious Liquid Substance, NF, (3) n.o.s. ("trade name" contains "principal components") Cat X
Noxious Liquid Substance, F, (4) n.o.s. ("trade name" contains "principal components") Cat X
Noxious Liquid Substance, NF, (5) n.o.s. ("trade name" contains "principal components") Cat Y
Noxious Liquid Substance, F, (6) n.o.s. ("trade name" contains "principal components") Cat Y
Noxious Liquid Substance, NF, (7) n.o.s. ("trade name" contains "principal components") Cat Y
Noxious Liquid Substance, F, (8) n.o.s. ("trade name" contains "principal components") Cat Y
Noxious Liquid Substance, NF, (9) n.o.s. ("trade name" contains "principal components") Cat Z
Noxious Liquid Substance, F, (10) n.o.s. ("trade name" contains "principal components") Cat Z
Noxious Liquid Substance, (11) n.o.s. ("trade name" contains "principal components") Cat Z

	Non-noxious Liquid Substance, (12) n.o.s. ("trade name" contains "principal components") Cat OS
	n-Octyl Mercaptan
	Offshore contaminated bulk liquid P (Pollution-only products)
	Offshore contaminated bulk liquid S (Safety hazard products)
	Oleum <sup>1</sup>
	Orange juice (concentrated)
	Orange juice (not concentrated)
	Oxygenated aliphatic hydrocarbon mixture
	Phosphorus, yellow or white
	Phosphosulfurized (alternately Phosphosulphurized) bicycle terpene
	Phthalate-based polyester polyol <sup>1</sup>
	Polyalkylalkenaminesuccinimide, molybdenum oxysulfide
	Potassium polysulfide (alternately polysulphide), Potassium thiosulfide (alternately thiosulphide) solution (41% or less)
	2-Propene-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer solution
	Refrigerant gases
	Sodium chlorate solution (50% or less) <sup>1</sup>
	Sodium dichromate solution (70% or less) <sup>1</sup>
	Sodium hydrogen sulfide (alternately sulphide) (6% or less)/Sodium carbonate (3% or less) solution <sup>1</sup>
	Sodium methoxide (25% in methanol)
	Sodium methylate (21-30% in methanol)
	Sodium sulfide (alternately sulphide)/Hydrosulfide (alternately Hydrosulphide) solution (H <sub>2</sub> S 15 ppm or less)
	Sodium sulfide (alternately sulphide), Hydrosulfide (alternately Hydrosulphide) solution (H <sub>2</sub> S greater than 15 ppm but less than 200 ppm) <sup>1</sup>
	Sodium sulfide (alternately sulphide)/Hydrosulfide (alternately Hydrosulphide) solution (H <sub>2</sub> S greater than 200 ppm)
	Sodium thiocyanate solution (56% or less) <sup>1</sup>
	Sulfur (alternately Sulphur) (molten)
	Sulfur (alternately Sulphur) dioxide
	Tall oil fatty acid, barium salt <sup>1</sup>
	Tetraethyl silicate monomer/oligomer (20% in ethanol)
	Urea, Ammonium mono- and di-hydrogen phosphate/Potassium chloride solution
	Wood lignin with Sodium acetate/oxalate
1. Non- Oxidizing Mineral Acids	Di-(2-ethylhexyl) phosphoric acid

	Ferric chloride solution
	Fluorosilicic acid (20-30%) in water solution
	Fluorosilicic acid (30% or less)
	Hydrochloric acid
	Hydrofluorosilicic acid (25% or less)
	Phosphoric acid  Delvelveniesee (alternataly Delvelveniesee) alterials calution
2 C 1C :	Polyaluminum (alternately Polyaluminium) chloride solution
2. Sulfuric (Alternately Sulphuric) Acids	Sulfuric (alternately Sulphuric) acid <sup>1</sup>
	Sulfuric (alternately sulphuric) acid, spent
	Titanium tetrachloride
3. Nitric Acids	Ferric nitrate/Nitric acid solution
	Nitric acid (70% or less)
4. Organic Acids	Acetic acid <sup>1</sup>
	Acetic acid <sup>1</sup>
	Butyric acid
	Chloroacetic acid (80% or less)
	2- or 3-Chloropropionic acid
	Citric acid (70% or less)
	Decanoic acid
	2,2-Dichloropropionic acid
	Dimethyl octanoic acid
	Fish protein concentrate (containing 4% or less formic acid)
	Fish silage protein concentrate (containing 4% or less formic acid)
	Formic acid <sup>1</sup>
	Formic acid (85% or less)
	Formic acid (over 85%)
	Formic acid mixture (containing up to 18% Propionic acid and up to 25% Sodium formate)
	Glycolic acid (70% or less)
	Glyoxylic acid solution (50% or less)
	n-Heptanoic acid
	1,6-Hexanediol, distillation overheads
	Hexanoic acid
	2-Hydroxy-4-(methylthio)butanoic acid
	Jatropha oil
	Long-chain alkyl (C13+) salicylic acid
	Methacrylic acid
	procedure dela

	Naphthenic acid
	Neodecanoic acid
	Nonanoic acid (all isomers)
	Nonanoic/Tridecanoic acid mixture
	Octanoic acid (all isomers)
	Oleic acid
	Pentanoic acid
	n-Pentanoic acid (64%)/2-Methyl butyric acid (36%) mixture
	Propionic acid
	Trimethylacetic acid
	Undecanoic acid
5. Caustics	Aluminum (alternately Aluminium) hydroxide/sodium hydroxide/sodium carbonate solution (40% or less)
	Ammonium sulfide (alternately sulphide) solution (45% or less)
	Calcium hydroxide slurry
	Calcium hypochlorite solution (15% or less)
	Calcium hypochlorite solution (more than 15%)
	Caustic potash solution <sup>1</sup>
	Caustic soda solution <sup>1</sup>
	Cresylic acid, sodium salt solution
	1,4-Dihydro-9,10-dihydroxy anthracene, disodium salt solution
	Kraft black liquor
	Kraft pulping liquors (free alkali content 3% or more) (Black, Green, or White)
	Magnesium hydroxide slurry
	Mercaptobenzothiazol, sodium salt solution
	2-Mercaptobenzothiazol (in liquid mixture)
	Potassium hydroxide solution <sup>1</sup>
	Sodium acetate, Glycol, Water mixture (containing 1% or less Sodium hydroxide) (if non-flammable or non-combustible)
	Sodium acetate, Glycol, Water mixture (containing Sodium hydroxide)
	Sodium aluminate solution
	Sodium aluminate solution (45% or less)
	Sodium borohydride (15% or less)/Sodium hydroxide solution
	Sodium carbonate solutions
	Sodium cyanide solution
	Sodium hydrosulfide (alternately hydrosulphide) solution (45% or less) <sup>1</sup>
	Sodium hydrosulfide (alternately hydrosulphide)/Ammonium sulfide (alternately sulphide) solution <sup>1</sup>
	Sodium hypochlorite solution (15% or less)
	Sodium hypochlorite solution (20% or less)

	Sodium 2-mercaptobenzothiazol solution
	Sodium nitrite solution
	Triphenylborane (10% or less)/Caustic soda solution
	Trisodium phosphate solution
	Vanillin black liquor (free alkali content 3% or more)
6. Ammonia	Ammonia, anhydrous
	Ammonium hydroxide (28% or less Ammonia)
	Urea/Ammonium nitrate solution (containing 1% or more Ammonia)
7. Aliphatic Amines	Alkyl amine (C17+)
	Alkyl (C12+) dimethylamine
	N-Aminoethylpiperazine
	Butylamine (all isomers)
	Crude piperazine
	Cyclohexylamine
	Dibutylamine
	Diethylamine <sup>1</sup>
	Diethylenetriamine <sup>1</sup>
	Diisobutylamine
	Diisopropylamine
	Dimethylamine
	Dimethylamine solution (45% or less)
	Dimethylamine solution (greater than 45% but not greater than 55%)
	Dimethylamine solution (greater than 55% but not greater than 65%)
	N,N-Dimethylcyclohexylamine
	N,N-Dimethyldodecylamine
	Di-n-propylamine
	Dodecylamine/Tetradecylamine mixture
	Dodecyldimethylamine/Tetradecyldimethylamine mixture
	Ethoxylated tallow alkyl amine
	Ethoxylated tallow alkyl amine, glycol mixture
	Ethoxylated tallow amine (>95%)
	Ethylamine <sup>1</sup>
	Ethylamine solution (72% or less)
	N-Ethylbutylamine
	N-Ethylcyclohexylamine
	Ethyleneamine EA 1302 <sup>1</sup>
	Ethylenediamine <sup>1</sup>
	2-Ethylhexylamine
	N-Ethylmethylallylamine

Glyphosate solution (not containing surfactant)	
Hexamethylenediamine (molten)	
Hexamethylenediamine solution	
Hexamethylenimine	
Hexamethylenetetramine solutions	
bis-(Hydrogenated tallow alkyl) methyl amines	
Isophoronediamine	
Isopropylamine	
Isopropylamine (70% or less) solution	
Long-chain alkyl amine	
Long-chain polyetheramine in alkyl (C2-C4) benzenes	
Metam sodium solution	
Methylamine solutions (42% or less)	
2-Methyl-1,5-pentanediamine	
Monoethylamine	
Morpholine <sup>1</sup>	
Oleylamine	
Pentaethylenehexamine	
Pentaethylenehexamine/Tetraethylenepentamine mixture	
Phosphate esters, alkyl (C12-C14) amine	
Piperazine (70% or less)	
Piperazine (crude)	
Piperazine, 68% solution	
Polyalkenyl succinic anhydride amine	
Polyethylene polyamines <sup>1</sup>	
Polyethylene polyamines (more than 50% C5-C20 Paraffin oil)	
Poly(iminoethylene)-graft-N-poly (ethyleneoxy) solution (90% or	r less)
(Polyisobutene) amino products in aliphatic hydrocarbons	
Polyisobutenamine in aliphatic (C10-C14) solvent	
Polyolefin amide alkeneamine/Molybdenum oxysulfide (alternate oxysulphide) mixture	ely
Polyolefinamine (C17+)	
Polyoxypropylenediamine	
n-Propylamine	
iso-Propylamine solution	
Sodium N-methyl dithio carbamate solution	
Sulfohydrocarbon (alternately Sulphohydrocarbon), long-chain (Calkylamine mixture	C18+)
Tetraethylenepentamine <sup>1</sup>	

	Triethylamine
	Triethylenetetramine <sup>1</sup>
	Trimethylamine solution (30% or less)
	Trimethylhexamethylenediamine (2,2,4- and 2,4,4-)
8.	Timetry mexametry tenedramine (2,2,4- and 2,4,4-)
Alkanolamines	
	2-(2-Aminoethoxy)ethanol
	Aminoethyldiethanolamine/Aminoethylethanolamine solution
	Aminoethylethanolamine
	2-Amino-2-methyl-1-propanol
	Diethanolamine
	Diethylaminoethanol
	Diisopropanolamine
	Dimethylethanolamine <sup>1</sup>
	Ethanolamine
	Ethoxylated alkyloxy alkyl amine
	Ethoxylated long-chain (C16+) alkyloxyalkanamine
	Isopropanolamine
	Isopropanolamine solution
	Linear alkyl (C12-C16) propoxyamine ethoxylates
	Methyl diethanolamine
	Monoethanolamine
	Monoisopropanolamine
	n-Propanolamine
	Triethanolamine
	Triisopropanolamine
9. Aromatic Amines	Alkyl (C8-C9) phenylamine in aromatic solvents
	Amine C-6, morpholine process residue
	Aniline
	Calcium long chain alkyl phenolic amine (C8-C40)
	4-Chloro-2-methylphenoxyacetic acid, Dimethylamine salt solution
	Dialkyl (C8-C9) diphenylamines
	2,6-Diethylaniline
	2,6-Dimethylaniline
	Diphenylamine (molten)
	Diphenylamine, reaction product with 2,2,4-trimethylpentene
	Diphenylamines, alkylated
	2-Ethyl-6-methyl-N-(1'-methyl-2-methoxyethyl)aniline
	1,3,5-Hexahydrotriethanol-1,3,5-triazine solution
	J-7-7

	Hexahydro-1,3,5-trimethyl-1,3,5-triazine solution (45% or less)
	N-Methylaniline
	2-Methyl-6-ethyl aniline
	2-Methyl-5-ethylpyridine
	Methylpyridine
	2-Methylpyridine
	3-Methylpyridine
	4-Methylpyridine
	N-Methyl-2-pyrrolidone <sup>1</sup>
	Paraldehyde-Ammonia reaction product
	Polyolefin phenolic amine (C28-C250)
	Pyridine Pyridine
	Pyridine bases
	Toluenediamine
	o-Toluidine
10. Amides	Acetochlor
10.7 Hindes	Acrylamide solution (50% or less)
	Alkenyl (C11+) amide
	N,N-Dimethylacetamide
	N,N-Dimethylacetamide solution
	N,N-Dimethylacetamide solution (40% or less)
	Dimethylformamide
	Formamide
	N,N-bis(2-Hydroxyethyl) oleamide
	Octadecenoamide solution
	Oleamide solution
	Organomolybdenum amide
	Polybutenyl succinimide
	Polyisobutenyl succinimide
	Sulfurized (alternately Sulphurized) polyolefinamide
	Zinc alkenyl carboxamide
11. Organic Anhydrides	Acetic anhydride
	Alkenyl (C16-C20) succinic anhydride
	Alkyl succinic anhydride
	Maleic anhydride
	Maleic anhydride/sodium allylsulphonate copolymer solution
	Phthalic anhydride (molten)
	Polyisobutenyl anhydride adduct
	Polyisobutylene succinic anhydride

	Polyolefin anhydride
	Propionic anhydride
12.	1 Topionic amyunuc
Isocyanates	Diphenylmethane diisocyanate
	Hexamethylene diisocyanate
	Isophorone diisocyanate
	Polymethylene polyphenyl isocyanate
	Toluene diisocyanate
	Trimethylhexamethylene diisocyanate (2,2,4- and 2,4,4-)
13. Vinyl Acetates	Vinyl acetate
	Vinyl ethyl ether
	Vinyl neodecanate
	Vinyl toluene
14. Acrylates	Butyl acrylate (all isomers)
	Butyl methacrylate
	Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture
	Cetyl/Eicosyl methacrylate mixture
	Decyl acrylate
	Dodecyl methacrylate
	Dodecyl/Octadecyl methacrylate mixture
	Dodecyl/Pentadecyl methacrylate mixture
	Ethyl acrylate
	2-Ethylhexyl acrylate
	Ethyl methacrylate
	2-Hydroxyethyl acrylate <sup>1</sup>
	Isobutyl methacrylate
	Methacrylic resin in ethylene dichloride
	Methyl acrylate
	Methyl methacrylate
	Nonyl methacrylate monomer
	Polyalkyl acrylate
	Polyalkyl (C18-C22) acrylate in Xylene
	Polyalkyl (C10-C20) methacrylate
	Polyalkyl methacrylate in mineral oil
	Polyalkyl (C10-C18) methacrylate/Ethylene-propylene copolymer mixture
15. Substituted Allyls	Acrylonitrile <sup>1</sup>
	Allyl alcohol <sup>1</sup>
	Allyl chloride
	IL -

	Dishlaramanana (all isamana)
	Dichloropropene (all isomers)
	1,3-Dichloropropene
	Dichloropropene/Dichloropropane mixtures
	Methacrylonitrile
16. Alkylene Oxides	Brominated Epoxy Resin in Acetone
	1,2-Butylene oxide
	Diglycidyl ether of Bisphenol A
	Diglycidyl ether of Bisphenol F
	Epoxy resin
	Ethylene oxide/Propylene oxide mixture
	Ethylene oxide/Propylene oxide mixture with an Ethylene oxide content not more than 30% by mass
	Propylene oxide
17. Epichlorohydri ns	Chlorohydrins
	Chlorohydrins (crude)
	Epichlorohydrin
18. Ketones	Acetone <sup>1</sup>
	Acetophenone
	Butyl heptyl ketone
	Camphor oil (light)
	1-(4-Chlorophenyl)-4,4-dimethyl pentan-3-one <sup>1</sup>
	Cyclohexanone
	Cyclohexanone/Cyclohexanol mixtures
	Diisobutyl ketone
	Ethyl amyl ketone
	Isophorone
	Ketone residue
	Mesityl oxide <sup>1</sup>
	Methyl amyl ketone
	Methyl butyl ketone
	Methyl ethyl ketone <sup>1</sup>
	Methyl heptyl ketone
	Methyl isoamyl ketone
	Methyl isobutyl ketone <sup>1</sup>
	Methyl propyl ketone
	beta-Propriolactone
19. Aldehydes	Acetaldehyde
	Acrolein <sup>1</sup>
	L

	Butyraldehyde (all isomers)
	Crotonaldehyde <sup>1</sup>
	Crude isononylaldehyde
	Decaldehyde
	n-Decaldehyde
	2-Ethyl-3-propylacrolein <sup>1</sup>
	Formaldehyde (50% or more)/Methanol mixtures <sup>1</sup>
	Formaldehyde solutions (37%-50%) <sup>1</sup>
	Formaldehyde solutions (45% or less) <sup>1</sup>
	Furfural
	Glutaraldehyde solutions (50% or less)
	Glyoxal solution (40% or less)
	Isodecaldehyde
	Isononylaldehyde (crude)
	3-Methyl butyraldehyde
	Methylolureas
	3-(Methylthio)propionaldehyde
	Octyl aldehyde
	Paraldehyde
	Pentyl aldehyde
	Propionaldehyde
	Valeraldehyde (all isomers)
20. Alcohols, Glycols	Acrylonitrile-Styrene copolymer dispersion in Polyether polyol
	Alcoholic beverages
	Alcohol (C9-C11) poly (2.5-9) ethoxylates
	Alcohol (C6-C17) (secondary) poly (3-6) ethoxylates
	Alcohol (C10-C18) poly (7) ethoxylates
	Alcohol (C6-C17) (secondary) poly (7-12) ethoxylates
	Alcohol (C12-C16) poly (1-6) ethoxylates
	Alcohol (C12-C16) poly (7-19) ethoxylates
	Alcohol (C12-C16) poly (20+) ethoxylates
	Alcohol polyethoxylates
	Alcohol polyethoxylates, secondary
	Alcoholic beverages, n.o.s.
	Alcohols (C12+), primary, linear
	Alcohols (C8-C11), primary, linear and essentially linear
	Alcohols (C12-C13), primary, linear and essentially linear
	Alcohols (C14-C18), primary, linear and essentially linear
	Alcohols (C13+)

Alkyl/cyclo (C4-C5) alcohols:
Amyl alcohol, primary
n-Amyl alcohol
sec-Amyl alcohol
tert-Amyl alcohol
Cetyl Alcohol (Hexadecanol)
Oleyl Alcohol (Octadecenol)
Pentadecanol.
Tallow alcohol
Tetradecanol
Tridecanol
Behenyl alcohol
Bio-fuel blends of Gasoline and Ethyl alcohol (>25% but <99% by volume)
Brake fluid base mix: Poly(2-8)alkylene (C2-C3) glycols/Polyalkylene (C2-C10) glycols monoalkyl (C1-C4) ethers and their borate esters
2-Butoxyethanol (58%)/Hyperbranched polyesteramide (42%) (mixture)
Butyl alcohol (all isomers) <sup>1</sup>
n-Butyl alcohol
Butylene glycol
Choline chloride solutions
Crude Isopropanol
Cyclohexanol
Decyl alcohol (all isomers) <sup>1</sup>
Decyl/Dodecyl/Tetradecyl alcohol mixture
Diacetone alcohol <sup>1</sup>
2,2-Dimethylpropane-1,3-diol (molten or solution)
tert-Dodecanethiol <sup>1</sup>
Dodecyl alcohol (all isomers)
n-Dodecyl mercaptan
Ethoxylated alcohols, C11-C15
Ethyl alcohol <sup>1</sup>
Ethyl butanol
Ethylene chlorohydrin
Ethylene cyanohydrin
Ethylene glycol <sup>1</sup>
Ethylene glycol (>75%)/Sodium alkyl carboxylates/borax mixture
Ethylene glycol (>85%)/Sodium alkyl carboxylates mixture
Furfuryl alcohol <sup>1</sup>
Glycerine <sup>1</sup>

Glycerine (83%)/Dioxanedimethanol (17%) mixture
Glycerol
Glycerol monooleate
Glycol mixture, crude
Heptanol (all isomers)
Hexadecanol (Cetyl alcohol)
Hexamethylene glycol
Hexanol
Hexylene glycol
Isoamyl alcohol
Isobutyl alcohol
Isopropyl alcohol
Methacrylic acid - Alkyloxypoly (alkylene oxide) methacrylate
copolymer, sodium salt aqueous solution (45% or less)
3-Methoxy-1-butanol
Methyl alcohol <sup>1</sup>
Methyl amyl alcohol
alpha-Methylbenzyl alcohol with Acetophenone (15% or less)
Methyl butanol
Methyl butenol
Methyl 3- (3,5 di-tert-butyl-4-hydroxyphenyl) propionate crude melt
Methyl butynol
Methylcyclohexanemethanol (crude)
2-Methyl-2-hydroxy-3-butyne
Methyl isobutyl carbinol
3-Methyl-3-methoxybutanol
2-Methyl-1,3-propanediol
Molasses
Nonyl alcohol (all isomers) <sup>1</sup>
1-Octadecanol
Octadecenol (oleyl alcohol)
Octanol (all isomers) <sup>1</sup>
Octyl alcohol <sup>1</sup>
Pentacosa(oxypropane-2,3-diyl)s
Polyalkylene oxide polyol
Polybutadiene, hydroxyl terminated
Polyglycerine/Sodium salts solution (containing less than 3% Sodium hydroxide) <sup>1</sup>
Polyglycerol
Polyolefin amide alkeneamine polyol

n-Propyl alcohol <sup>1</sup>
Propylene glycol <sup>1</sup>
Sorbitol solution
Stearyl alcohol
Tallow alcohol
Tallow fatty alcohol (C13+)
Trimethyl nonanol
Trimethylol propane polyethoxylated
Undecanol
Undecyl alcohol
Wine
Alkyl (C4-C9) phenols
Alkylated (C4-C9) hindered phenols
Alkylphenols (C10-C18, C12 rich)
Benzyl alcohol
Carbolic oil
Creosote <sup>1</sup>
Creosote (coal tar)
Creosote (wood tar)
Cresols (all isomers)
Cresol/Phenol/Xylenol mixture
Cresols with 5% or more phenol
Cresols with less than 5% phenol
Cresylic acid
Cresylic acid dephenolized
Cresylic acid tar
Cresylic acid with 5% or more phenol
Dibutylphenols
2,4-Dichlorophenols
Di-tert-butylphenol
2,4-Di-tert-butylphenol
2,6-Di-tert-butylphenol
2,4-Dichlorophenol
Dodecyl phenol
o-Ethyl phenol
Long-chain alkylphenate/Phenol sulfide (alternately sulphide) mixture
Long-chain alkylphenol (C14-C18)
Long-chain alkylphenol (C18-C30)
Long-chain arkylphenor (C16-C30)

Nonylphenol
Nonylphenol (48-62%)/Phenol (42-48%)/Dinonylphenol (1-10%) mixture
Octyl phenol
Phenol
Tertiary butylphenols
Xylenols
epsilon-Caprolactam (molten or aqueous solutions)
Acrylic acid/ethenesulfonic (alternately ethenesulphonic) acid copolymer with phosphonate groups, sodium salt solution
Aryl polyolefin (C11-C50)
Butadiene (all isomers)
Butadiene/Butylene mixtures (containing Acetylenes)
Butene oligomer
Butylenes (all isomers)
1,5,9-Cyclododecatriene
Cyclopentadiene/Styrene/Benzene mixture
1,3-Cyclopentadiene dimer (molten)
Cyclopentene
Decene
Dicyclopentadiene, Resin Grade, 81-89%
Diisobutylene
Dipentene
Dodecene (all isomers)
1-Dodecene
Ethylene
Ethylidene norbornene <sup>1</sup>
Heptene (all isomers)
Hexene (all isomers)
Isoprene (all isomers)
Isoprene (part refined)
Isoprene concentrate (Shell)
Latex ammonia (1% or less)-inhibited
d-Limonene
Methyl acetylene/Propadiene mixture
Methyl butenes
Methylcyclopentadiene dimer

2-Methyl-1-pentene
4-Methyl-1-pentene
alpha-Methylstyrene
Mixed C4 Cargoes
Myrcene
Nonene (all isomers)
1-Octadecene
Octene (all isomers)
Olefin-Alkyl ester copolymer (molecular weight 2000+)
Olefin mixture (C7-C9) C8 rich, stabilized
Olefin mixtures (C5-C7)
Olefin mixtures (C5-C15)
Olefins (C13+, all isomers)
alpha-Olefins (C6-C18) mixtures
1,3-Pentadiene
1,3-Pentadiene (greater than 50%), Cyclopentene and isomers, mixtures
Pentene (all isomers)
Pentene
alpha-Pinene
beta-Pinene
Piperylene concentrate
Poly(4+)isobutylene (molecular weight >224)
Polyisobutylene (molecular weight ≤224)
Polyolefin in mineral oil
Poly(5+)propylene
Propylene
Propylene-butylene copolymer
Propylene dimer
Propylene tetramer
Propylene trimer
Propylene/Propane/MAPP gas mixture
Styrene monomer
Tetradecene
Tridecene
Triisobutylene
Tripropylene
Turpentine
Undecene
1-Undecene
Alkanes (C10-C26) linear and branched (flash point >60 °C)

es (C10-C26) linear and branched (flash point ≤60 °C) es (C6-C9)
es (C6-C9)
anes (C9-C11)
anes (C10+) (all isomers)
cyclo-Alkanes (C10-C11)
cyclo-Alkanes (C12+)
e (all isomers)
e/Propane mixture
neptane
nexane
pentane
cyclohexane
ne-Propylene copolymer (in liquid mixtures)
decane (all isomers)
carbon wax
pylcyclohexane
ne
lcyclohexane
hyl pentane
e (all isomers)
e (all isomers)
in wax
ne (all isomers)
pha olefins
ne
acrylate-Vinyl pyridine copolymer in Toluene
(C3-C4) benzenes:
utylbenzenes
ımene
opylbenzenes
(C5-C8) benzenes:
mylbenzenes
eptylbenzenes
exylbenzenes
ctylbenzenes
(C9+) benzenes
cylbenzenes

Dodecylbenzenes
Nonylbezenes
Tetradecylbenzenes
Tetrapropylbenzenes
Tridecylbenzenes
Undecylbenzenes
Alkylbenzenes mixtures (containing naphthalene)
Alkylbenzene mixtures (containing at least 50% of Toluene)
Alkylbenzene, Alkylindane, Alkylindene mixture (each C12-C17)
Alkyl toluene
Alkyl (C18+) toluenes
Benzene
Benzene and mixtures having 10% Benzene or more
Benzene hydrocarbon mixtures (containing Acetylenes) (having 10% Benzene or more)
Benzene/Toluene/Xylene mixtures (having 10% Benzene or more)
Butyl phenol, Formaldehyde resin in Xylene
Butyl toluene
C9 Resinfeed (DSM) <sup>1</sup>
p-Cymene
Detergent alkylate
Diethylbenzene
Diisopropylbenzene (all isomers)
Diisopropylnaphthalene
Diphenyl
Dodecyl xylene
Ethylbenzene
Ethyl toluene
1-Hexadecylnaphthalene/1,4-bis (Hexadecyl) naphthalene mixture
1,n-Hexadecylnaphthalene (90%)/1,4-Di-n-(Hexadecyl) naphthalene (10%)
Hexylbenzenes
Methyl naphthalene (molten)
Naphthalene crude (molten)
Naphthalene (molten)
Naphthalene still residue
Parachlorobenzotrifluoride
1-Phenyl-1-xylyl ethane
Poly(2+) cyclic aromatics
Polyolefinamine in alkyl (C2-C4) benzenes

	Polyolefinamine in aromatic solvent
	Pyrolysis gasoline (containing Benzene)
	Tetrahydronaphthalene
	Tetramethylbenzene (all isomers)
	C9 Resinfeed (DSM) <sup>2</sup>
	1,2,3,5-Tetramethylbenzene
	Toluene
	Tridecylbenzene
	Triethylbenzene
	Trimethylbenzene (all isomers)
	Xylenes
	Xylenes/Ethylbenzene (10% or more) mixture
33. Miscellaneous Hydrocarbon Mixtures	Alachlor technical (90% or more)
	Alkylbenzene sulfonic (alternately sulphonic) acid, sodium salt solution
	Alkyl dithiothiadiazole (C6-C24)
	Alkyl (C18-C28) toluenesulfonic (alternately toluenesulphonic) acid, Calcium salts, high overbase
	Alkyl (C18-C28) toluenesulfonic (alternately toluenesulphonic) acid,
	Calcium salts, low overbase
	Asphalt
	Asphalt blending stocks, roofers flux
	Asphalt blending stocks, straight run residue
	Asphalt emulsion
	Asphalt, kerosene, and other components
	Aviation alkylates (C8 paraffins and isoparaffins BPT 95 to 120 °C)
	Bio-fuel blends of Diesel/gas oil and Alkanes (C10-C26), linear and branched with a flash point >60 °C (>25% but <99% by volume)
	Bio-fuel blends of Diesel/gas oil and Alkanes (C10-C26), linear and branched with a flash point ≤60 °C (>25% but <99% by volume)
	Calcium sulfonate (alternately sulphonate)/Calcium carbonate/Hydrocarbon solvent mixture
	Coal tar
	Coal tar crude bases
	Coal tar distillate
	Coal tar pitch (molten)
	Coal tar, high temperature
	Decahydronaphthalene
	Diphenyl/Diphenyl ether mixture
	Distillates, flashed feed stocks

Distillator starials
Distillates, straight run
Drilling mud (low toxicity) (if flammable or combustible)
Gas oil, cracked
Gasoline blending stock, alkylates
Gasoline blending stock, reformates
Gasolines:
Automotive (containing not over 4.23 grams lead per gal.)
Aviation (containing not over 4.86 grams lead per gal.)
Casinghead (natural)
Polymer
Straight run
Jet Fuels:
JP-4
JP-5
JP-8
Kerosene
Mineral spirits
Naphtha:
Aromatic
Coal tar solvent
Heavy
Paraffinic
Petroleum
Solvent
Stoddard solvent
Varnish Makers' and Painters'
Oil, fuel:
No. 1
No. 1-D
No. 2
No. 2-D
No. 4
No. 5
No. 6
Oil, misc.:
Aliphatic
Aromatic
Clarified
Coal
Crude

	Diesel
	Gas, cracked
	Gas, high pour
	Gas, low pour
	Gas, low sulfur (alternately sulphur)
	Heartcut distillate
	Lubricating
	Mineral
	Mineral seal
	Motor
	Neatsfoot
	Penetrating
	Pine
	Residual
	Road
	Rosin
	Spindle
	Transformer
	Turbine
	Vacuum gas oil
	Oxyalkylated alkyl phenol formaldehyde
	Petrolatum
	Petroleum wax
	Polybutene
	Polyolefin (molecular weight 300+)
	Polyolefin amide alkeneamine (C17+)
	Polyolefin amide alkeneamine (C28+)
	Polyolefin amide alkeneamine borate (C28-C250)
	Polyolefin amide alkeneamine in mineral oil
	Polyolefinamine (C28-C250)
	Sulfohydrocarbon (alternately Sulphohydrocarbon) (C3-C88)
	Sulfurized (alternately Sulphurized) fat (C14-C20)
	Sulfurized (alternately Sulphurized) polyolefinamide alkene (C28-C250) amine
	Waxes: Petroleum
	White spirit
	White spirit (low (15-20%) aromatic)
34. Esters	Alkenyl (C8+) amine, Alkenyl (C12+) acid ester mixture
	Alkyl dithiocarbamate (C19-C35)
	Alkyl ester copolymer (C4-C20)

Allers agreement in main and ail
Alkyl ester copolymer in mineral oil
Alkyl (C7-C9) nitrates <sup>1</sup>
Alkyl (C8-C40) phenol sulfide (alternately sulphide)
Alkyl (C10-C20), (saturated and unsaturated) phosphite
Alkyl sulfonic (alternately sulphonic) acid ester of phenol
Alkyl (C18-C28) toluenesulfonic (alternately toluenesulphonic) acid, Calcium salts, borated
Alkylaryl phosphate mixtures (more than 40% Diphenyl tolyl phosphate, less than 0.02% ortho-isomer)
Amyl acetate (all isomers)
Amyl acid phosphate
Animal and Fish oils, n.o.s.:
Cod liver oil
Lanolin
Neatsfoot oil
Pilchard oil
Sperm oil
Animal and Fish acid oils and distillates, n.o.s.:
Animal acid oil
Fish acid oil
Lard acid oil
Mixed acid oil
Mixed general acid oil
Mixed hard acid oil
Mixed soft acid oil
Barium long-chain (C11-C50) alkaryl sulfonate (alternately sulphonate)
Barium long-chain alkyl (C8-C14) phenate sulfide (alternately sulphide)
Benzenetricarboxylic acid trioctyl ester
Benzyl acetate
Bio-fuel blends of Diesel/gas oil and FAME (>25% but <99% by volume)
Bio-fuel blends of Diesel/gas oil and vegetable oil (>25% but <99% by volume) Boronated calcium sulfonate
Bis (2-ethylhexyl) terephthalate
Boronated calcium sulfonate (alternately sulphonate)
Butyl acetate (all isomers)
Butyl benzyl phthalate
Butyl butyrate (all isomers)
n-Butyl formate
n-Butyl propionate

Butyl stearate	
Calcium alkyl (C10-C28) salicylate	
Calcium alkyl (C9) phenol sulfide (alternately sulphide), polyc	olefin
phosphorosulfide (alternately phosphorosulphide) mixture	
Calcium carbonate slurry	
Calcium long-chain alkaryl sulfonate (alternately sulphonate) (C50)	(C11-
Calcium long-chain alkyl (C5-C10) phenate	
Calcium long-chain alkyl (C5-C20) phenate	
Calcium long-chain alkyl (C11-C40) phenate	
Calcium long-chain alkyl (C18-C28) salicylate	
Calcium long-chain alkyl phenate sulfide (alternately sulphide C40)	) (C8-
Calcium long-chain alkyl salicylate (C13+)	
Calcium nitrate solutions (50% or less)	
Calcium nitrate/Magnesium nitrate/Potassium chloride solution	n
Calcium salts of fatty acids	
Calcium stearate	
Cobalt naphthenate in solvent naphtha	
Copper salt of long-chain (C17+) alkanoic acid	
Copper salt of long-chain (C3-C16) fatty acid	
Cyclohexane-1,2-dicarboxylic acid,diisononyl ester	
Cyclohexyl acetate	
Decyl acetate	
Dialkyl (C7-C13) phthalates:	
2,6-Diaminohexanoic acid phosphonate mixed salts solution	
Di-(2-ethylhexyl) phthalate	
Diheptyl phthalate	
Dihexyl phthalate	
Diisooctyl phthalate	
Dioctyl phthalate	
Diisodecyl phthalate	
Diisononyl phthalate	
Dinonyl phthalate	
Ditridecyl phthalate	
Diundecyl phthalate	
Dialkyl thiophosphates sodium salts solution	
Dibutyl hydrogen phosphonate	
Dibutyl phthalate	
Dibutyl terephthalate	
Di-(2-ethylhexyl) adipate	

Di-(2-ethylhexyl) terephthalate
Diethylene glycol dibenzoate
Diethylene glycol phthalate
Diethyl phthalate
Diethyl sulfate (alternately sulphate)
Di-n-hexyl adipate
Diisobutyl phthalate
Dimethyl adipate
Dimethylcyclicsiloxane hydrolyzate
Dimethyl glutarate
Dimethyl hydrogen phosphite <sup>1</sup>
Dimethyl naphthalene sulfonic (alternately sulphonic) acid, sodium salt solution <sup>1</sup>
Dimethyl phthalate
Dimethylpolysiloxane
Dimethyl succinate
Dipropylene glycol dibenzoate
Dithiocarbamate ester (C7-C35)
Ditridecyl adipate
2-Dodecenylsuccinic acid, dipotassium salt solution
2-Ethoxyethyl acetate
Ethyl acetate
Ethyl acetoacetate
Ethyl butyrate
2-Ethyl-2-(2,4-dichlorophenoxy) acetate
2-Ethyl-2-(2,4-dichlorophenoxy) propionate
S-Ethyl dipropylthiocarbamate
Ethylene carbonate
Ethylene glycol acetate
Ethylene glycol butyl ether acetate
Ethylene glycol diacetate
Ethylene glycol methyl ether acetate
Ethyl-3-ethoxypropionate
Ethyl hexyl phthalate
Ethyl hexyl tallate
2-Ethyl-2-(hydroxymethyl) propane-1,3-diol (C8-C10) ester
Ethyl lactate
Ethyl propionate
Fatty acid methyl esters
Fatty acids (C8-C10)

Fatty acids (C12+)
Fatty acids (saturated, C13+)
Fatty acids (C16+)
Fatty acids, essentially linear (C6-C18) 2-ethylhexyl ester
Glyceryl triacetate
Glycidyl ester of C10 trialkyl acetic acid
Glycidyl ester of tertiary carboxylic acid
Glycidyl ester of tridecyl acetic acid
Glycidyl ester of Versatic acid
Glycol diacetate
Glycol triacetate
Heptyl acetate
Herbicide (C15-H22-NO2-Cl)
Hexyl acetate
Hog grease
Isobutyl formate
Isopropyl acetate
Lauric acid
Lauric acid methyl ester/Myristic acid methyl ester mixture
Lecithin
Magnesium long-chain alkaryl sulfonate (alternately sulphonate) (C11-C50)
Magnesium long-chain alkyl phenate sulfide (alternately sulphide) (C8-C20)
Magnesium long-chain alkyl salicylate (C11+)
Magnesium nonyl phenol sulfide (alternately sulphide)
Magnesium sulfonate (alternately sulphonate)
3-Methoxybutyl acetate
1-Methoxy-2-propyl acetate
Methyl acetate
Methyl acetoacetate
Methyl amyl acetate
Methyl butyrate
Methyl formate
3-Methyl-3-methoxybutyl acetate
Methyl salicylate
N-(2-Methoxy-1-methyl ethyl)-2-ethyl-6-methyl chloroacetanilide
Metolachlor
Naphthalene sulfonic (alternately sulphonic) acid, sodium salt solution
Nitrilotriacetic acid, trisodium salt solution
The northeodic dota, disodium sait solution

Nonyl acetate
Nonyl phenol sulfide (90% or less) solution
Octamethylcyclotetrasiloxane
n-Octyl acetate
Octyl decyl adipate
Octyl nitrate
Octyl phthalate
Oil, edible:
Beechnut
Castor
Cocoa butter
Coconut
Cod liver
Corn
Cotton seed
Fish
Grape seed
Groundnut
Hazelnut
Illipe
Lard
Maize
Mango kernel
Nutmeg butter
Olive
Palm
Palm kernel
Palm kernel olein
Palm kernel stearin
Palm mid fraction
Palm olein
Palm stearin Peanut Poppy Poppy seed Raisin seed Rapeseed Rapeseed, (low erucic acid containing less than 4% free fatty acids) Rice bran Safflower

Salad	
Sesame	
Shea butter	
Soyabean	
Sunflower	
Sunflower s	eed
Tucum	
Vegetable	
Walnut	
Oil, misc.:	
Acid mixture refining	from soyabean, corn (maize) and sunflower oil
Animal	
Camelina	
Cashew nut s	hell oil (untreated)
Coconut fatty	acid
Coconut, fatt	y acid methyl ester
Cottonseed o	
Lanolin	
Linseed	
Oiticica	
Palm acid	
Palm fatty ac	id distillate
Palm oil, fatt	y acid methyl ester
Palm kernel a	ncid
Palm kernel	fatty acid distillate
Palm, non-e	dible industrial grade
Perilla	
Pilchard	
Rapeseed fa	tty acid methyl esters
Seal	
Soapstock	
Soyabean (e	poxidized)
Soyabean fa	tty acid methyl ester
Tall	
Tall, crude	
Tall, distille	d
Tall, fatty ac	pid
	eid (resin acids less than 20%)
Tall pitch	

Tung
Used cooking oil
Used cooking oil (triglycerides, C16-C18 and C18 unsaturated)
n-Pentyl propionate
Phosphate esters
[[(Phosphonomethyl)imino]bis[ethylenenitrilobis(methylene)]]tetrakisp hosphonic acid, ammonium salt solution (60% or less)
Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether acetate:
Diethylene glycol butyl ether acetate
Diethylene glycol ethyl ether acetate
Diethylene glycol methyl ether acetate
Polycarboxylic ester (C9+)
Polyferric sulfate (alternately sulphate) solution
Polymerized esters
Polymethylsiloxane
Polyolefin aminoester salts (molecular weight 2000+)
Polyolefin ester (C28-C250)
Polyolefin phosphorosulfide (alternately phosphorosulphide), barium derivative (C28-C250)
Poly(20)oxyethylene sorbitan monooleate
Polysiloxane
Polysiloxane/White spirit, low (15-20%) aromatic
Potassium formate solutions
Potassium formate solution (75% or more)
Potassium oleate
Potassium salt of polyolefin acid
n-Propyl acetate
Propylene carbonate
Propylene glycol methyl ether acetate
Shea butter
Siloxanes
Sodium acetate solution
Sodium acetate/Glycol/Water mixture (not containing Sodium hydroxide)
Sodium alkyl (C14-C17) sulfonates (alternately sulphonates) 60-65% solution
Sodium aluminosilicate slurry
Sodium benzoate
Sodium bicarbonate solution (less than 10%)
Sodium dimethyl naphthalene sulfonate (alternately sulphonate) solution <sup>2</sup>

Sodium long-chain alkyl salicylate (C13+)
Sodium naphthalene sulfonate (alternately sulphonate) solution
Sodium petroleum sulfonate (alternately sulphonate)
Sodium sulfate (alternately sulphate) solution
Tall oil soap, crude
Tallow
Tallow fatty acid
Tributyl phosphate
Tricresyl phosphate (containing 1% or more ortho-isomer)
Tricresyl phosphate (containing less than 1% ortho-isomer)
Tridecanoic acid
Tridecyl acetate
Triethylene glycol di-(2-ethylbutyrate)
Triethylene glycol dibenzoate
Triethyl phosphate
Triethyl phosphite <sup>1</sup>
Triisooctyl trimellitate <sup>1</sup>
Triisopropylated phenyl phosphates
Trimethyl phosphite <sup>1</sup>
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate
2,2,4-Trimethyl-1,3-pentanediol-1-isobutyrate
2,2,4-Trimethyl-3-pentanol-1-isobutyrate
Trisodium nitrilotriacetate solution
Trixylyl phosphate
Trixylenyl phosphate
Vegetable acid oils, n.o.s.:
Corn acid oil
Cottonseed acid oil
Dark mixed acid oil
Groundnut acid oil
Mixed acid oil
Mixed general acid oil
Mixed hard acid oil
Mixed soft acid oil
Rapeseed acid oil
Safflower acid oil
Soya acid oil
Sunflower seed acid oil
Vegetable oil mixtures, containing less than 15% free fatty acid (m)
Vegetable fatty acid distillates, n.o.s.:

Palm kernel fatty acid distillate	
Palm oil fatty acid distillate	
Tall fatty acid distillate	
Tall oil fatty acid distillate	
Vegetable oils, n.o.s.:	
Beechnut oil	
Camelina oil	
Cashew nut shell	
Castor oil	
Cocoa butter	
Coconut oil	
Corn oil	
Cotton seed oil	
Croton oil	
Grape seed oil	
Groundnut oil	
Hazelnut oil	
Illipe oil	
Linseed oil	
Mango kernel oil	
Nutmeg butter	
Oiticica oil	
Olive oil	
Palm kernel oil	
Palm kernel olein	
Palm kernel stearin	
Palm mid fraction	
Palm, non-edible industrial grade	
Palm oil	
Palm olein	
Palm stearin	
Peanut oil	
Peel oil (oranges and lemons)	
Perilla oil	
Pine oil	
Poppy seed oil	
Poppy oil	
Raisin seed oil	
Rapeseed oil	
Rapeseed (low erucic acid containing less than 4% free fatty acids)	
1 (	

	Rice bran oil		
	Rosin oil		
	Safflower oil		
	Salad oil.		
	Sesame oil		
	Shea butter		
	Soyabean oil		
	Sunflower seed oil		
	Tall		
	Tall, crude		
	Tall, distilled		
	Tall, pitch		
	Tucum oil		
	Tung oil		
	Walnut oil		
	Waxes:		
	Candelilla		
	Carnauba		
	Zinc alkaryl dithiophosphate (C7-C16)		
	Zinc alkyl dithiophosphate (C3-C14)		
35. Vinyl Halides	Vinyl chloride		
	Vinylidene chloride		
36. Halogenated Hydrocarbons	Benzyl chloride		
	Bromochloromethane		
	Carbon tetrachloride <sup>1</sup>		
	Catoxid feedstock <sup>1</sup>		
	Chlorinated paraffins (C10-C13)		
	Chlorinated paraffins (C14-C17) (with 50% Chlorine or more, and less than 1% C13 or shorter chains)		
	Chlorinated paraffins (C14-C17) (with 52% Chlorine)		
	Chlorinated paraffins (C18+) with any level of Chlorine		
	Chlorobenzene		
	Chloroform		
	m-Chlorotoluene		
	o-Chlorotoluene		
	p-Chlorotoluene		
	Chlorotoluenes (mixed isomers)		
	Dibromomethane		

	Dichlorobenzene (all isomers)	
	3,4-Dichloro-1-butene	
	Dichlorodifluoromethane	
	1,1-Dichloroethane	
	1,6-Dichlorohexane	
	Dichloromethane	
	Dichloropropane	
	1,1-Dichloropropane	
	1,2-Dichloropropane	
	1,3-Dichloropropane	
	Ethyl chloride	
	Ethylene dibromide	
	Ethylene dichloride <sup>1</sup>	
	Methyl bromide	
	Methyl chloride	
	Methylene chloride	
	Monochlorodifluoromethane	
	Pentachloroethane Pentachloroethane	
	Perchloroethylene Perchloroethylene	
	n-Propyl chloride	
	Sym-trichlorobenzene	
	Tetrachloroethane	
	1,1,2,2-Tetrachloroethane	
	1,2,3-Trichlorobenzene (molten)	
	1,2,4-Trichlorobenzene	
	1,2,3-Trichlorobenzol	
	1,1,1-Trichloroethane <sup>1</sup>	
	1,1,2-Trichloroethane	
	Trichloroethylene <sup>1</sup>	
	1,1,2-Trichloro-1,2,2-trifluoroethane	
	1,2,3-Trichloropropane	
37. Nitriles	Acetonitrile	
57. INITITIES	Acetonitrile (low purity grade)	
	Adiponitrile  Adiponitrile	
	Lactonitrile solution (80% or less)	
	2-Methylglutaronitrile	
	2-Methylglutaronitrile with 2-Ethylsuccinonitrile (12% or less)	
	Propionitrile  Propionitrile	
	Tallow alkyl nitrile	
	Tanow aikyi munc	

38. Carbon Disulfide (Alternately Disulfide)	Carbon disulfide (alternately disulphide)	
39. Sulfolane (Alternately Sulfolane)	Sulfolane (alternately Sulpholane)	
40. Glycol Ethers	Alkyl (C7-C11) phenol poly(4-12) ethoxylates	
	Alkyl (C9-C15) phenyl propoxylate	
	Alkyl (C10-C15, C12 rich) phenol poly(4-12)ethoxylate	
	Diethylene glycol <sup>1</sup>	
	Diethylene glycol butyl ether	
	Diethylene glycol dibutyl ether	
	Diethylene glycol diethyl ether	
	Diethylene glycol ethyl ether	
	Diethylene glycol methyl ether	
	Diethylene glycol n-hexyl ether	
	Diethetylene glycol phenyl ether	
	Diethylene glycol propyl ether	
	Dipropylene glycol	
	Dipropylene glycol butyl ether	
	Dipropylene glycol methyl ether	
	2-Ethoxyethanol	
	Ethoxy triglycol (crude)	
	Ethylene glycol dibutyl ether	
	Ethylene glycol monoalkyl ethers:	
	Ethylene glycol butyl ether	
	Ethylene glycol tert-butyl ether	
	Ethylene glycol ethyl ether	
	Ethylene glycol hexyl ether	
	Ethylene glycol isopropyl ether	
	Ethylene glycol methyl butyl ether	
	Ethylene glycol methyl ether	
	Ethylene glycol propyl ether	
	Ethylene glycol n-propyl ether	
	Ethylene glycol phenyl ether	
	Ethylene glycol phenyl ether/Diethylene glycol phenyl ether mixture	
	Glucitol/Glycerol blend propoxylated (containing less than 10% amines)	
	Glucitol/Glycerol blend propoxylated (containing 10% or more amines)	

Glycerol, ethoxylated	
Glycerol polyalkoxylate	
Glycerol, propoxylated	
Glycerol, propoxylated and ethoxylated	
Glycerol/Sucrose blend propoxylated and ethoxylated	
alpha-Hydro-omega-hydroxytetradeca (oxytetramethylene)	
Methoxy triglycol	
Nonyl phenol poly(4+)ethoxylates	
Pentaethylene glycol methyl ether	
Polyalkylene glycols/Polyalkylene glycol monoalkyl ethers mixtures	
Poly(2-8)alkylene glycol monoalkyl (C1-C6) ethers:	
Diethylene glycol butyl ether	
Diethylene glycol ethyl ether	
Diethylene glycol n-hexyl ether	
Diethylene glycol methyl ether	
Diethylene glycol propyl ether	
Dipropylene glycol butyl ether	
Dipropylene glycol methyl ether	
Polyalkylene glycol butyl ether	
Polyethylene glycol monoalkyl ether	
Polypropylene glycol methyl ether	
Tetraethylene glycol methyl ether	
Triethylene glycol butyl ether	
Triethylene glycol ethyl ether	
Triethylene glycol methyl ether	
Tripropylene glycol methyl ether	
Polyethylene glycol	
Polyalkylene glycol butyl ether	
Polyethylene glycol dimethyl ether	
Poly (ethylene glycol) methylbutenyl ether (molecular weight >1000)	
Polypropylene glycol	
Poly (tetramethylene ether) glycols (molecular weight 950-1050)	
Polytetramethylene ether glycol	
Propylene glycol monoalkyl ethers:	
n-Propoxypropanol	
Propylene glycol n-butyl ether	
Propylene glycol ethyl ether	
Propylene glycol methyl ether	
Propylene glycol propyl ether	
Propylene glycol phenyl ether	

	Tetraethylene glycol	
	Triethylene glycol	
	Triethylene glycol butyl ether mixture	
	Triethylene glycol ether mixture	
	Tripropylene glycol	
41. Ethers	Alcohol (C12-C13, branched and linear) poly(4-8)propoxy sulfates (alternately sulphates), sodium salt 25-30% solution	
	Alkaryl polyethers (C9-C20)	
	tert-Amyl ethyl ether	
	tert-Amyl methyl ether	
	n-Butyl ether	
	Dichloroethyl ether	
	2,2'-Dichloroisopropyl ether	
	Diethyl ether	
	Dimethyl ether	
	Dimethyl furan	
	1,4-Dioxane	
	Diphenyl ether	
	Diphenyl ether/Diphenyl phenyl ether mixture	
	Ethyl tert-butyl ether <sup>1</sup>	
	Isopropyl ether	
Long chain alkaryl polyether (C11-C20)		
	Methyl-tert-butyl ether <sup>1</sup>	
	Methyl tert-pentyl ether	
	Polyether, borated	
	Polyether (molecular weight 1350+)	
	Polyether polyols	
	Poly(oxyalkylene) alkenyl ether (molecular weight >1000)	
	Polyoxybutylene alcohol	
	Propyl ether	
	Tetrahydrofuran	
	1,3,5-Trioxane	
42. Nitrocompoun ds	o-Chloronitrobenzene	
	Dinitrotoluene (molten)	
	Nitrobenzene	
	o-Nitrochlorobenzene	
	Nitroethane	
	Nitroethane (80%)/Nitropropane (20%)	
	Nitroethane/1-Nitropropane (each 15% or more) mixture	
L	<u>, , , , , , , , , , , , , , , , , , , </u>	

	Nitrophenol (mixed isomers)	
	Nitropropane (60%)/Nitroethane (40%) mixtures	
	1- or 2-Nitropropane	
	o- or p-Nitrotoluenes	
43. Miscellaneous Water Solutions	Alkyl (C8-C10) polyglucoside solution (65% or less)	
	Alkyl (C8-C10)/(C12-C14):(40% or less/60% or more) polyglucoside solution (55% or less)	
	Alkyl (C8-C10)/(C12-C14):(50%/50%) polyglucoside solution (55% or less)	
	Alkyl (C8-C10)/(C12-C14):(60% or more/40% or less) polyglucoside solution (55% or less)	
	Alkyl (C12-C14) polyglucoside solution (55% or less)	
	Aluminum sulfate (alternately Aluminium sulphate) solution <sup>1</sup>	
	2-Amino-2-hydroxymethyl-1,3-propanediol solution	
	Ammonium bisulfite (alternately bisulphite) solution (70% or less) <sup>1</sup>	
	Ammonium chloride solution (less than 25%)	
	Ammonium polyphosphate solution	
	Ammonium sulfate (alternately sulphate) solution	
	Ammonium sulfate (alternately sulphate) solution (20% or less)	
	Ammonium thiosulfate (alternately thiosulphate) solution (60% or less)	
Apple juice Caramel solutions		
	Clay slurry	
	Coal slurry	
	Corn syrup	
	Cyclohexane oxidation products, sodium salts solution	
	Dextrose solution	
	2,4-Dichlorophenoxyacetic acid, Diethanolamine salt solution	
	2,4-Dichlorophenoxyacetic acid, Triisopropanolamine salt solution <sup>1</sup>	
	Diethylenetriaminepentaacetic acid, pentasodium salt solution	
	Dodecyl diphenyl ether disulfonate (alternately disulphonate) solution	
	Drilling brines (containing Calcium, Potassium, or Sodium salts)	
	Drilling brines (containing Zinc salts)	
	Drilling brines, including: Calcium bromide solution, Calcium chloride solution, and Sodium chloride solution	
Drilling mud (low toxicity) (if non-flammable or non-comb		
	Ethylenediaminetetracetic acid/tetrasodium salt solution	

Ethylene-Vinyl acetate copolymer (emulsion)	
Ferric hydroxyethylethylenediaminetriacetic acid, trisodium salt	
solution <sup>1</sup>	
Fish solubles (water-based fish meal extracts)	
Fructose solution	
Fumaric adduct of Rosin, water dispersion	
Glucose solution	
Hexamethylenediamine adipate (50% in water)	
Hexamethylenediamine adipate solution	
N-(Hydroxyethyl)ethylenediamine triacetic acid, trisodium salt solution	
Kaolin clay solution /suspension	
Kaolin slurry	
Latex, liquid synthetic	
Latex: Carboxylated Styrene-Butadiene copolymer; Styrene-butadiene rubber	
Lauryl polyglucose	
Lauryl polyglucose (50% or less)	
Lignin liquor	
Ligninsulfonic (alternately Ligninsulphonic) acid, magnesium salt solution	
Ligninsulfonic (alternately Ligninsulphonic) acid, sodium salt solution	
Liquid Streptomyces solubles	
L-Lysine solution (60% or less)	
Magnesium nitrate solution (66.7%)	
Microsilica slurry	
Milk	
N-Methylglucamine solution	
Naphthenic acid, sodium salt solution	
Pentasodium salt of Diethylenetriaminepentaacetic acid solution	
Phenol solutions (2% or less)	
Polyacrylic acid solution (40% or less)	
Potassium chloride solution	
Potassium chloride solution (10% or more)	
Potassium chloride solution (less than 26%)	
Potassium thiosulfate (alternately thiosulphate) (50% or less)	
Rosin soap (disproportionated) solution	
Sewage sludge	
Silica slurry	
Sludge, treated	
Sodium bromide solution (less than 50%)	
Sodium hydrogen sulfite (alternately sulphite) solution (45% or less)	

Sodium lignosulfonate (alternately lignosulphonate) solution	
Sodium naphthalene sulfonate solution (40% or less), see Naphthalene sulphonic acid, sodium salt solution (40% or less)	
Sodium naphthenate solution, see Naphthenic acid, sodium salt solut	
Sodium poly(4+)acrylate solution	
Sodium polyacrylate solution <sup>1</sup>	
Sodium salt of Ferric hydroxyethylethylenediaminetriacetic acid solution	
Sodium silicate solution <sup>1</sup>	
Sodium sulfide (alternately sulphide) solution (15% or less)	
Sodium sulfite (alternately sulphite) solution (25% or less)	
Sodium tartrates/Sodium succinates solution	
Sulfonated (alternately Sulphonated) polyacrylate solution <sup>1</sup>	
Tall oil soap (disproportionated) solution	
Tetrasodium salt of ethylenediaminetetraacetic acid solution	
Titanium dioxide slurry	
Triisopropanolamine salt of 2,4-Dichlorophenoxyacetic acid solution	
Trisodium salt of N-(Hydroxyethyl)ethylenediaminetriacetic acid solution	
Urea solution	
Urea/Ammonium nitrate solution (containing less than 1% free Ammonia)	
Urea/Ammonium phosphate solution	
Vegetable protein solution (hydrolyzed)	
Water	

## **Notes:**

- <sup>1</sup> Due to potential compatibility issues, see Appendix I to 46 CFR part 150 (Exceptions to the Chart).
  - 6. Amend Appendix I to Part 150 by:
  - a. In the table in paragraph (a):
- i. After the entry for "Caustic soda 50% or less (5)", add an entry for "2,4, D Dimethyl amine salt (DMA 806) (0)";
  - ii. Remove the entry for "Dimethyl disulfide (alternately disulfide) (0)";
- iii. Adding in alphabetic order entries for "Dimethyl disulfide (alternately disulphide) (0)"; "tert-Dodecanethiol (Sulfole 120) (0)", "tert-Dodecanethiol (0)", "n-

Dodecyl mercaptan (0)", "Hexamethylenediamine (7)", "Hexamethylenediamine (molten) (HMD 98%, molten) (7)", "Hexamethylenediamine solution (7)", "Hexamethylenediamine solution (HMD 90%) (7)", "Phenol (90% hydrated) (21)", "Sodium hydrosulfide (alternatively hydrosulphide) solution (5)", "Sodium Methylate, 30% solution in Methanol (0)", "Sulfuric (alternatively Sulphuric) acid (95-98%) (2)"; and

b. Amend paragraph (b) by adding entries, in alphabetical order, for "Glycol Ethers (Group 40)" and "Toluene diisocyanate (TDI) (12)".

The additions read as follows:

## Appendix I to Part 150 – Exceptions to the Chart

(a)\* \* \*

Member of reactive group	Compatible with	
****		
2,4, D Dimethyl amine salt (DMA 806)	Acetone (18)	
(0)	Ethyl Acrylate (14)	
	Methyl Alcohol (20)	
	Toluene (32)	
* * *	* * * *	
tert-Dodecanethiol (Sulfole 120) (0)	Acetone (18)	
	Ethyl Acrylate (14)	
	Methyl Alcohol (20)	
	Polymeric methylene diphenyl	
	diisocyanate (Papi 27) (12)	
	Toluene (32)	
tert-Dodecanethiol (0)	All Chemicals in Group 33	
	Acetone (18)	
n-Dodecyl-mercaptan (0)	All chemicals in Group 33	
* * *	* * * *	
Hexamethylenediamine (7)	Ethyl Alcohol (Ethanol) (20)	
Hexamethylenediamine (molten) (HMD 98%, molten) (7)	n-Butyl Alcohol (20)	
	Isobutyl Alcohol (20)	
	Isopropyl Alcohol (20)	
Hexamethylenediamine solution (7)	CepSinol TM 1216 (Alcohols (C12+),	
•	primary, linear) (20)	
Hexamethylenediamine solution (HMD 90%) (7)	n-Butyl Alcohol (20)	
	Isobutyl Alcohol (20)	
	Isopropyl Alcohol (20)	
****		

Phenol (90% hydrated) (21)	Toluene diisocyante (12)	
*****		
Sodium hydrosulfide (alternatively	Ethyl Alcohol (Ethanol) (20)	
hydrosulphide) solution (5)		
***	***	
Sodium Methylate, 30% solution in	n-Butyl Alcohol (20)	
Methanol (0)	Decene (30)	
	Decyl Alcohol (20)	
	Dialkyl (C9-C10) phthalates (34)	
	Dichloromethane (36)	
	Ethanolamine (8) (including	
	Monoethanolamine)	
	Hexene (all isomers) (30)	
	Methyl Isobutyl Ketone (18)	
	Olefin mixtures (C5-C15) (30)	
	Olefins (C13+ all isomers) (30)	
	Phenol (21)	
	n-Propyl Alcohol (20	
	Propylheptanol (20)	
	C9-Resinfeed (32)	
	Sodium Borohydride (15% or	
	less)/Sodium hydroxide solution (5)	
	Solvent Naphtha (33)	
	Styrene Monomer (30)	
	Toluene (32)	
	Xylenes (Incl. <i>m</i> -Xylene ) (32)	
	* * * *	
Sulfuric (alternatively Sulphuric) acid (95-98%) (Group 2)	Methyl ester fatty acid (34)	
	Soybean oil (34)	
* * * * * *		

(h) \* \* \*

\* \* \* \* \*

Glycol Ethers (Group 40) are not compatible with Acrylonitrile (Group 15);

\* \* \* \* \*

Toluene diisocyanate (TDI) (12) is not compatible with Alkylbenzene sulphonic acid, sodium salt solution (Group 33), Calcium nitrate solutions (50% or less) (Group 34), Calcium nitrate/Magnesium nitrate/Potassium chloride solution (Group 34), Formaldehyde solutions (45% or less) (Group 19), Glutaraldehyde solutions (50% or less) (Group 19), Lactonitrile solution (80% or less) (Group 37), Nitrilotriacetic acid,

trisodium salt solution (Group 34), Sodium acetate solutions (Group 34), Sodium sulphate solutions (Group 34), Polyferric sulphate solution (Group 34).

\* \* \* \* \*

Dated: November 7, 2023.

W. R. Arguin Rear Admiral, U.S. Coast Guard Assistant Commandant for Prevention Policy

[FR Doc. 2023-25026 Filed: 11/20/2023 8:45 am; Publication Date: 11/21/2023]